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# KENTUCKY MEDICAL JOURNAL



OF KENTUCKY  
JAN 14 1941  
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Published Monthly by the Kentucky State Medical Association Under the Supervision of the Council

VOL. 39, No. 1

BOWLING GREEN, KY.

JANUARY, 1941

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Editorial and Business Offices, 519 Tenth Street

Entered as second-class matter, Oct. 22, 1916, at the Postoffice at Bowling Green, Ky. Acceptance for mailing at special rates postage provided for in Section 1103, act of October 6, 1917, authorized May 25, 1920.

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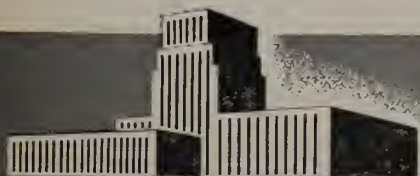
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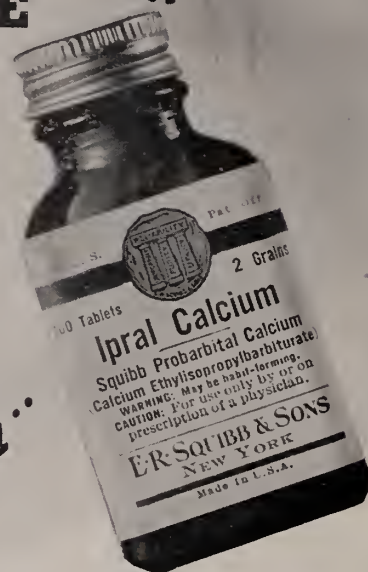
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COUNTY	SECRETARY	RESIDENCE	DATE
Adair.....	Todd Jefferies .....	Columbia .....	January 1
Allen.....	A. O. Miller.....	Scottsville .....	January 22
Anderson.....	J. B. Lyen.....	Lawrenceburg .....	January 6
Ballard.....	F. H. Russell.....	Wickliffe .....	
Barren.....	Rex Hayes.....	Glasgow .....	January 15
Bath.....	H. S. Gilmore.....	Owingsville .....	January 13
Bell.....	E. S. Wilson.....	Pineville .....	January 10
Boone.....	R. E. Ryle.....	Walton.....	January 15
Bourbon.....	B. N. Pittenger .....	Paris .....	January 16
Boyd.....	C. C. Sparks.....	Ashland .....	January 7
Boyle.....	P. C. Sanders.....	Danville .....	January 21
Bracken-Fendleton.....	W. A. McKenney.....	Falmouth .....	January 23
Breathitt.....	Phillip Bress .....	Jackson.....	January 21
Breckinridge.....	J. E. Kincheloe .....	Hardinsburg .....	
Bullitt.....	George B. Hill.....	Mt. Washington .....	
Butler.....	G. E. Embry.....	Morgantown .....	January 1
Caldwell.....	W. L. Cash.....	Princeton .....	January 7
Calloway.....	Hugh L. Houston.....	Murray .....	January 9
Campbell-Kenton.....	Joseph H. Humpert .....	Covington .....	January 2
Carlisle.....	E. E. Smith.....	Bardwell .....	January 7
Carroll.....	H. Carl Boylen.....	Carrollton .....	January 14
Carter.....	Don E. Wilder.....	Grayson .....	January 21
Casey.....	William J. Sweeney.....	Liberty .....	January 23
Christian.....	D. M. Clardy .....	Hopkinsville .....	January 21
Clark.....	R. E. Strode.....	Winchester .....	January 17
Clay.....	J. L. Anderson .....	Manchester .....	
Clinton.....	S. F. Stephenson.....	Albany .....	January 18
Crittenden.....	C. G. Moreland.....	Marion .....	January 13
Cumberland.....	W. F. Owsley.....	Burkesville .....	January 1
Daviess.....	Irvin Bensman.....	Owensboro .....	January 11 & 28
Elliott.....	W. H. Joyner (Acting Sec.) .....	Sandy Hook .....	
Estill.....	Virginia Wallace.....	Irvine.....	January 8
Fayette.....	D. E. Scott.....	Lexington .....	January 14
Fleming.....	Roy Orsburn.....	Flemingsburg .....	January 8
Floyd.....	J. G. Archer .....	Prestonsburg.....	January 29
Franklin.....	Grace R. Snyder.....	Frankfort .....	January 2
Fulton.....	D. L. Jones.....	Fulton.....	January 8
Gallatin.....	J. M. Stallard.....	Sparta.....	January 16
Garrard.....	J. E. Edwards.....	Lancaster .....	January 16
Grant.....	Lenore Patrick .....	Williamstown .....	January 15
Graves.....	H. H. Hunt.....	Mayfield .....	January 7
Grayson.....			
Green.....	S. J. Simmons.....	Greensburg .....	January 6
Greenup.....	L. C. Bate.....	Greenup .....	January 10
Hancock.....	F. M. Griffin.....	Hawesville .....	January 6
Hardin.....	D. E. McClure.....	Elizabethtown.....	January 9
Harlan.....	W. E. Riley.....	Harlan .....	January 18
Harrison.....	W. B. Moore.....	Cynthiana.....	January 6
Hart.....	Gordon L. Green.....	Horse Cave .....	January 7
Henderson.....	J. Leland Tanner.....	Henderson .....	January 13 & 27
Henry.....	Owen Carroll.....	New Castle .....	January 9
Hickman.....	Layson B. Swann.....	Clinton .....	January 2
Hopkins.....	David L. Salmon.....	Madisonville.....	January 2
Jackson.....	Mary T. Arnold.....	McKee .....	January 4
Jefferson.....	W. B. Troutman.....	Louisville .....	January 6 & 20
Jessamine.....	J. A. VanArsdall.....	Nicholasville .....	January 23
Johnson.....	A. D. Slone.....	Paintsville .....	January 27
Knott.....			January 25
Knox.....	W. Parker Clifton.....	Barbourville .....	January 16
Larue.....			
Laurel.....	Oscar D. Brock.....	London .....	January 8
Lawrence.....	L. S. Hayes.....	Louisa.....	January 20
Lee.....	W. D. McCollum.....	Beattyville .....	January 11
Leslie.....	John H. Kooser (Acting Sec.) .....	Hyden .....	January 24
Letcher.....	T. M. Ferry.....	Jenkins .....	January 28
Lewis.....	C. F. Pennington.....	Vanceburg .....	January 20
Lincoln.....	Lewis J. Jones.....	Hustonville .....	January 17
Livingston.....	C. M. Fischbach.....	Smithland .....	
Logan.....	E. M. Thompson.....	Russellville .....	
Lyon.....	H. H. Woodson.....	Eddyville .....	January 7
McCracken.....	J. V. Pace.....	Paducah .....	January 22
McCreary.....	R. M. Smith.....	Stearns .....	January 6
McLean.....	Alan R. Will.....	Calhoun .....	January 9
Madison.....	C. B. Billington .....	Richmond .....	January 16
Magoffin.....			

COUNTY	SECRETARY	RESIDENCE	DATE
Marion.....	W. E. Oldham.....	Lebanon.....	January 28
Marshall.....	S. L. Henson.....	Benton.....	January 15
Martin.....			
Mason.....	C. W. Christine.....	Maysville.....	January 8
Meade.....	S. H. Smith.....	Brandenburg.....	January 23
Menifee.....	E. T. Riley.....	Frenchburg.....	
Mercer.....	J. Tom Price.....	Harrodsburg.....	January 14
Metcalfe.....	E. S. Dunham.....	Edmonton.....	
Monroe.....	Geo. E. Bushong.....	Tompkinsville.....	
Montgomery.....	D. H. Bush.....	Mount Sterling.....	January 14
Morgan.....			
Muhlenberg.....	E. L. Gates.....	Greenville.....	January 14
Nelson.....	R. H. Greenwell.....	Bardstown.....	
Nicholas.....	T. F. Scott.....	Carlisle.....	January 20
Ohio.....	Oscar Allen.....	McHenry.....	January 1
Oldham.....			January 7
Owen.....	K. S. McBee.....	Owenton.....	January 2
Owsley.....	W. H. Gibson.....	Booneville.....	January 6
Perry.....	D. D. Turner.....	Hazard.....	January 13
Pike.....	F. H. Hodges.....	Pikeville.....	January 20
Powell.....	I. W. Johnson.....	Stanton.....	January 6
Pulaski.....	M. C. Spradlin.....	Somerset.....	January 9
Robertson.....			
Rockcastle.....	Lee Chestnut.....	Mount Vernon.....	January 3
Rowan.....	A. W. Adkins.....	Morehead.....	January 13
Russell.....	J. R. Popplewell.....	Jamestown.....	January 13
Scott.....			January 2
Shelby.....	A. D. Doak.....	Shelbyville.....	January 16
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Spencer.....			
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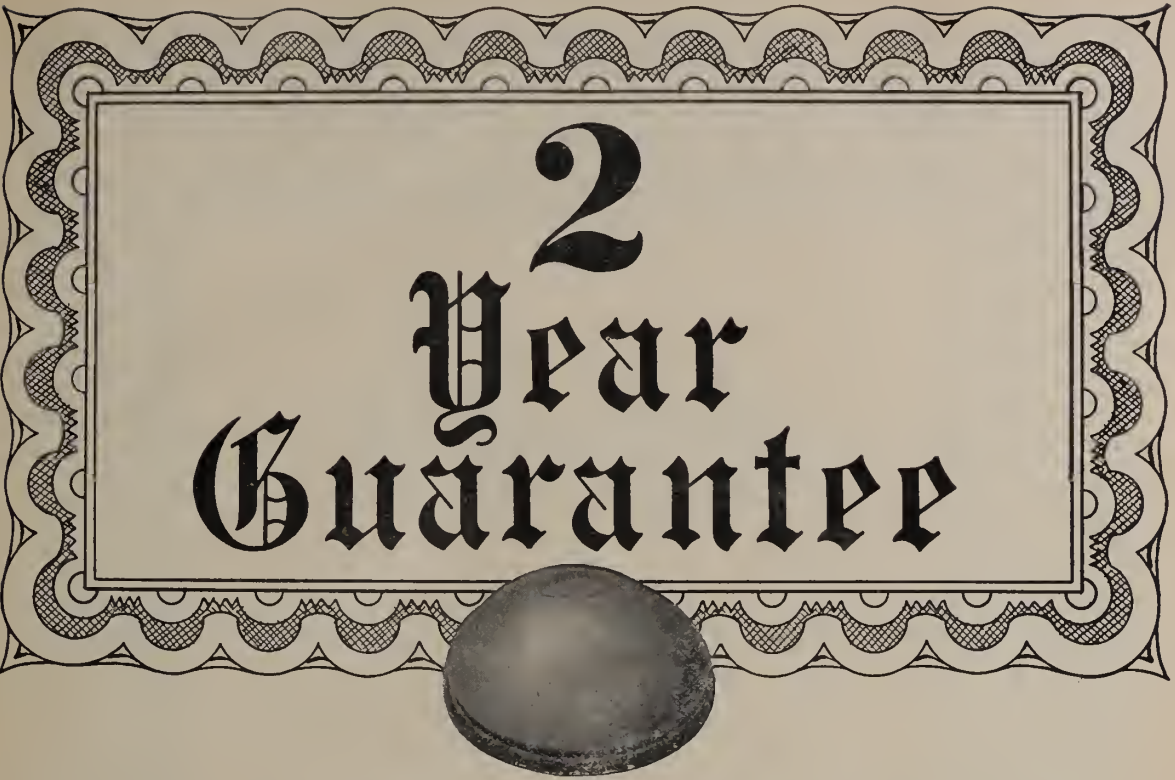
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# KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

VOL. 39, No. 1

BOWLING GREEN, KY.

JANUARY, 1941

## PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION

The American Medical Association advocates:

1. The establishment of an agency of federal government under which shall be coordinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American System of democracy.



## EDITORIALS

MESSAGE FROM THE  
PRESIDENT-ELECT

In these times when civilization throughout the world seems to be tottering and our generation's darkest hours are about us, may I offer a prayer that the coming year may bring to us more hope of peace based upon justice and lasting security. At no time during the history of organized medicine has there been a greater responsibility upon the medical profession than that which faces us today. Not only are we obligated to furnish medical services to all the people but we have before us the problem of supplying qualified physicians in the great preparedness scheme now going on. Our responsibility is threefold: to assure the civil population adequate medical care, to provide the necessary medical services for the military forces of the nation and to hold tight the reins of the professional tradition which our forefathers so wisely founded.

During the World War, Kentucky furnished more than seven hundred doctors to the military forces of our nation. At the present time there are approximately one hundred doctors in Kentucky who belong to the Reserve Corps of the Army and Navy. There is a great immediate need of at least three times this number. Let me urge that the younger men, especially those within the draft age in cities or communities where they can be spared, make application for commissions in the Medical Reserve Corps. Times like these, when the safety of the nation is threatened, call for no less patriotism, even though we are not in actual combat.

Many of you will be called upon to render other patriotic services to your country, such as services on draft boards, advisory boards, appeal boards, etc. These are services no real American can refuse.

As your President-Elect, I pledge you my wholehearted cooperation in the advancement of all that is good in the program of organized medicine. No task will be too arduous, no endeavor too great for me in my earnest desire to carry on, in my humble way, the work of the many illustrious men who have filled this office before me.

Regardless of the unrest in worldly affairs, we must all strive to continue to exist as a progressive profession. With that idea in mind, may we look forward to a good program, good extemporaneous

discussions and good attendance at our fall meeting. To that end, the work on the program is going forward satisfactorily.

To every member of the medical profession, I extend greetings and best wishes for a Happy and Prosperous Year.

E. L. HENDERSON.

THE SCIENTIFIC EXHIBITS AT THE  
SOUTHERN

The recent meeting of the Southern Medical Association held in Louisville, was one of the most successful and enjoyable in its history. An outstanding feature of this meeting was the scientific display. There were ninety-five of these exhibits, and thirty-two were from the doctors of Kentucky.

At the state meeting at Lexington in September, there were thirty-five interesting and instructive scientific exhibits. The instruction gained from this source, and the progress displayed, are rapidly determining the importance of this part of the program in every forward-looking medical meeting, and have made it an indispensable part of our study.

The next meeting of the Kentucky State Medical Association will be held at the Brown Hotel in Louisville in the fall of 1941. We are appealing to every Kentucky doctor to begin now to prepare material and formulate plans to make a creditable exhibit at that meeting. Brief intervals between papers might well be used for a review and discussion of these scientific exhibits.

J. B. LUKINS.

## A DISTINGUISHED GUEST

Dr. Lewis J. Moorman, president of the American Trudeau Society, past-president of the Southern Medical Association and a noted authority on diseases of the chest, spoke before the Jefferson County Medical Society Monday, December Second. The size of the audience which greeted Dr. Moorman certified to the welcome which Kentucky is always glad to extend to such a distinguished son.

A native of Leitchfield, Dr. Moorman was graduated from Georgetown College and the University of Louisville School of Medicine. His post-graduate work was done at the New York Polyclinic Medical School and the University of Vienna. He is the founder of the Moorman Farm Sanatorium, Oklahoma City, and the author of numerous scientific papers and historical volumes in the field of medicine.

## MEDICAL CERTIFICATE AND MARRIAGE LICENSE

Each male and female applicant for marriage license after the first of the year must present a medical certificate to the county court clerk in order to obtain their marriage license.

Based upon history, physical examination, and laboratory tests from any approved Kentucky laboratory, the physician, licensed to practice medicine in Kentucky, will be charged with the responsibility of forming an opinion and certifying as to whether or not the applicant had syphilis in a communicable stage or in a stage likely to become communicable to a marital partner.

In most instances the applicant will be found to be free of syphilis and the medical certificate will be issued to the applicant, which certificate is valid for fifteen days from the date of completed examination. A copy of the certificate should be kept by the physician in his file in each instance. However, some applicants will be found to have evidence of syphilis infection and in these cases the medical certificate is withheld until the applicant has satisfied the Rules and Regulations of the State Board of Health regarding the spread of the infection to others.

Undoubtedly, some occasional perplexing problems will confront the examining physicians. For instance, making such decision as to whether a latent case of syphilis, without a history of infection, is likely or not to become communicable. Medical certificate should be issued to such applicants only after a consultation with the local health officer and it is decided in such consultation that the infection is not communicable or likely to become communicable. It is advisable that a record of such consultations be kept. This procedure will protect the physician in the case of the unreasonable patient as well as the public interest.

The still rarer problem will be in the case of the applicant with syphilis who protests the withholding of the medical certificate because the female applicant is pregnant. These applicants may obtain a hearing before the County Judge, which hearing should be held in chambers. Acting upon medical testimony given, the Judge may grant a court order for the issuance of the marriage license if the female applicant is found to be pregnant.

It is felt that although there may be a

few minor complicated problems in the mechanics of the operation of this law, that it will bring to light many cases of communicable syphilis in the young people of our State which far overshadows any difficulties that its intelligent, sympathetic enforcement may develop. Kentucky with its sister state, Tennessee, with similar acts, are joining the ranks of sixteen other states in requiring blood tests for both applicants for marriage license on January 1, 1941. These states are as follows: California, Colorado, Connecticut, Illinois, Indiana, Michigan, North Dakota, Oregon, Pennsylvania, New Jersey, New Hampshire, New York, Rhode Island, South Dakota, Wisconsin, and West Virginia. States requiring a venereal certificate, for the males are: Alabama, Louisiana, North Carolina, Texas and Wyoming.

## SEROLOGICAL LABORATORIES AND THE KENTUCKY PREMARITAL LAW

January 1, 1941, the Kentucky Premarital law becomes effective. This law requires that serologic tests for the detection of syphilis, as well as complete physical examinations, be done on both male and female applicants for marriage license and that the serologic tests be performed in laboratories approved by the State Commissioner of Health of Kentucky. It is hoped that approved private laboratories of the state will be utilized, whenever possible, in the performance of these tests.

In view of this prerequisite, an effort has been made to approve additional private laboratories, at their request, according to the regulations and specifications of the National Committee on the Evaluation of Laboratories for the Serodiagnosis of syphilis. Such an evaluation is of inestimable value to the laboratories themselves, to the physicians and to the public.

Laboratories whose tests are not reasonably specific (freedom from false positives) are likely to condemn as syphilitic persons who do not have the disease; and laboratories whose tests are not reasonably sensitive (true positive reactions) are apt to fail to find all the cases of syphilis that they should find. It is felt that reports from approved laboratories are as reliable as it is possible to obtain, since all have been approved by the same rigid regulations.

The law has as its objective the pre-



vention of syphilis in marital partners and of its transmission to the yet unborn children. There is an average of 50,000 marriages performed in Kentucky annually and surely from this number of approximately 100,000 people entering marriage, a considerable number who would otherwise innocently contract syphilis will be saved from such a tragedy.

Following is a list of laboratories that have successfully completed the standardization tests. As others are added or dropped from this approved list, they will be published in the JOURNAL.

Andrews-Blount Laboratory, 302 Security Trust Building, Lexington

Luther Bach Laboratory, 302 Finance Building, Newport

Andrew-Blount Laboratory, 302 Security Trust Building, Lexington

Booth Memorial Hospital Laboratory, Covington

Boyd County Health Department Laboratory, Ashland

Coffman-Sherman Laboratory, 115 E. Fourth Street, Owensboro

Clinical Laboratory, Foster Building, Owensboro

Dowden & Dowden Laboratory, Brown Building, Louisville

Morris Flexner Laboratory, 619 Heyburn Building, Louisville

Fuller-Gilliam Hospital Laboratory, Mayfield

Graves-Gilbert Clinic Laboratory, 1100 State Street, Bowling Green

Harlan Diagnostic Laboratory, Harlan

Hayswood Hospital Laboratory, Maysville

Alonzo Huffman Laboratory, Russell

Illinois Central Hospital Laboratory, Paducah

Inland Steel Company Hospital Laboratory, Wheelwright

Jenkins Hospital Laboratory, Jenkins

Jewish Hospital Laboratory, Louisville

C. B. Johnson Laboratory, Russell.

Irving F. Kanner Laboratory, 208 Security Trust Building, Lexington

Wm. Kenney Laboratory, Fifth Street, Paris

Kentucky Baptist Hospital Laboratory, Louisville

King's Daughters' Hospital Laboratory, Ashland

J. Murray Kinsman Laboratory, 606 Heyburn Building, Louisville

M. M. Lawrence Laboratory, Jamestown

The Lexington Clinic Laboratory, 100 North Upper Street, Lexington

Louisville City Health Department Laboratory, City Hospital, Louisville

Louisville Research Laboratory, Francis Building, Louisville

A. B. Loveman Laboratory, Heyburn Building, Louisville

Lynch Hospital Laboratory, Lynch

Martin & McNeill Laboratory, Brown Building, Louisville

Wm. Mason Memorial Hospital Laboratory, Murray

Massie Memorial Hospital Laboratory, Paris

Mayfield Hospital Laboratory, Mayfield

Mercer Laboratory, Harrodsburg

Methodist Hospital Laboratory, Pikeville

Middlesboro Hospital Laboratory, Middlesboro

Robert F. Monroe Laboratory, 610 Heyburn Building, Louisville.

Muhlenburg Community Hospital Laboratory, Greenville

Norton Infirmary Laboratory, Louisville

Paintsville Clinic Laboratory, Paintsville.

Paintsville Hospital Laboratory, Paintsville

Physicians Laboratory, Main & State Streets, Bowling Green

Physicians Laboratory, Francis Building, Louisville

The Ray Clinic Laboratory, 3812 Frankfort Avenue, Louisville

Riverside Hospital Laboratory, Paducah

T. J. Samson Community Hospital Laboratory, Glasgow

St. Anthony's Hospital Laboratory, Louisville

St. Elizabeth's Hospital Laboratory, Covington

St. Joseph's Hospital Laboratory, Lexington

St. Joseph's Infirmary Laboratory, Louisville

S. S. Mary & Elizabeth Hospital Laboratory, Louisville

Smith Hospital Laboratory, Corbin

Speers Memorial Hospital Laboratory, Dayton

State Department of Health Laboratory, 620 South Third Street, Louisville

Harry M. Weeter Clinical Laboratory, Heyburn Building, Louisville

Wilson Clinic Laboratory, Franklin

**Ice Ages**—According to a paper by Sir George Simpson, eminent British meteorologist, which appears in the annual report of the Smithsonian Institution, ice ages of the past were caused by increases in the sun's heat. The more heat from the sun the more water evaporated, the more clouds and hence the more precipitation.



## ORIGINAL ARTICLES

## APPENDICITIS IN CHILDREN

JAMES H. PRITCHETT, M. D.

Louisville

The profession points with pride to the great progress made in preventive medicine. Acute contagious diseases such as diphtheria, smallpox, scarlet fever, likewise typhoid fever and malaria have been reduced to an all time low. The campaign against tuberculosis, cancer and syphilis have not only decreased the incidence of these maladies but actually decreased the mortality and, in many instances, have given the hopeless victim a new lease on life. With the advent of the new chemotherapeutic agents, pneumonia has lost much of its potentiality. We could mention other important achievements but time forbids. There is a public health problem, medical as well as surgical, concerning whose record we are not proud. Despite campaigns conducted by the profession by way of press and radio, appendicitis continues to be a thorn in the medical flesh. Fitz (J.A.M.A., May 11, 1940) states, "Appendicitis in spite of being a fashionable and well studied disease for more than fifty years continues to slap our faces insultingly." W. H. Hutchinson, Jr. (J.A.M.A.), May 11, 1940) calls attention to the fact that of every twenty children who die, one dies of acute appendicitis. Perhaps we can do little to prevent the incidence but we can do something to reduce the high mortality. I think it no misstatement that appendicitis causes fully fifty per cent of all surgical emergencies in childhood. Add to this the fact that the mortality has increased from 11,000 in 1920 to 20,000 or more at the present; sufficient reason then for a paper on this topic.

I believe that acute appendicitis in children presents more difficulties than in the adult; in the first place a few important anatomical differences occur and, it is because of these factors that the condition assumes a most serious aspect. As is well known, there is relatively a larger amount of lymphoid tissue in the child's appendix to absorb infection, this produces a rapid wick-like spread over a larger area: the omentum being comparatively small offers little defensive power to wall off and localize the infection; furthermore, the fact of more frequent acute upper respira-

tory infections, also that many children bear pain well and that when they do complain, so often or too frequently a purgative is given. Thus we have a setup over which the child has no control. Etiologically, many factors may be mentioned, constipation, followed by drastic purgatives, upper respiratory infections, fecal concretions, intestinal parasites, allergy, rheumatic infections and perhaps trauma. I believe that there is a strong familial tendency.

Appendicitis in infancy while quite rare, does occur, the most common age seems to be between seven and fourteen years, males predominating. The presenting symptoms may be so clean cut and classical as to establish a diagnosis beyond question, yet again they may be so vague and bizarre, confusing the issue so that the condition may be entirely overlooked until peritonitis develops. On conservative estimate it appears that approximately in 60% of cases typical symptoms were noted, in 20% the symptoms while atypical will coincide with suspected appendicitis; the remainder of cases will be accompanied by misleading symptoms. It is this type that worry us a great deal. A typical case would be one presenting the following: generalized abdominal tenderness, nausea, vomiting, fever 99 to 100 or more, pain over McBurney's point, muscular rigidity and increased white cell count. The pain may be due to extra- or intra-abdominal infection and it is well to remember that in acute appendicitis the pain starts in the abdomen. The late John B. Murphy used to place special emphasis on the sequence of symptoms, and often excluded the diagnosis on the variation of symptoms. (Dr. Jesse Gerstley in *Medical Clinics of North America*, January, 1939). In other words, effect after cause. The pain is usually dull or it may be colic-like. It is seldom severe. Vomiting is usually an early sign and is seldom prolonged or retching in character and subsides early unless infection spreads rapidly. Naturally the symptoms will depend a great deal as to the location of the appendix. Sir G. Gordon Bruce, *Aberdeen Royal Infirmary*, (*Lancet*, June 3, 1939) states, "It is a mistake to think of a single clinical picture in acute appendicitis; there are several; each with its distinctive physical signs." He describes five types: first, appendix lying in iliac fossa; second, appendix lying laterally to Poupart's ligament; third, pelvic in type; fourth, retro-

cecal; fifth, high, governed by embryonic conditions close under liver. Finally, it might be mentioned that the appendix has been found in the left iliac fossa. With these thoughts in mind it is quite obvious that diagnosis may be at times difficult and confusing. The evaluation of abdominal tenderness and rigidity call for all the finesse at one's disposal. Extreme tact, diplomacy and gentleness are paramount. Rectal examination at times is of help. Remember it is a painful procedure and sometimes is misleading. Flexion of the right thigh is variable and, when present, is of considerable aid in forming a conclusion.

The blood picture in the majority of cases is of great help. Through the courtesy of Dr. W. H. Allen, Louisville, I quote the following: "It has been my observation that the blood picture in children varies but little from that found in the adult during an attack of acute appendicitis; however, in very young children in whom the percentage of neutrophils is normally lower than in adults, the neutrophils may fail to rise as high. In childhood one may rely on the blood count for diagnosis more than in the adult, since in acute infections and in appendicitis, especially, the appearance of immature neutrophils and variations in their nuclei have proven of great value. It is evident that the total white count does not signify the degree of severity of appendicitis in the adult. It is felt by some that the total white count is indicative of bodily resistance and the percentage of neutrophils the severity of infection. The method of dividing the neutrophils in myelocytes, juveniles, staff and segmented is in rather common use and seems to be of great aid in determining the diagnosis and degree of severity. Normally, in the circulating blood no myelocytes or juveniles are found, and only a small percentage of staffs are noted. These are known as shift cells, and increase of these young cells is spoken of by Schilling as left shift, and the quantity of these shifts is known as the Schilling Index. The quantity of the shift gives us quite an index as to the degree and incidence of inflammatory infection of the appendix. It is fully understood that the left shift and Schilling Index should not be taken alone as a means of diagnosis, but taken in conjunction with the total leucocyte count and the clinical symptoms, they do offer great aid. The more progressive the inflammation or infection becomes, the

higher the cell count and the greater the left shift. As an example, in chronic forms, the total white cell count may run eight to twelve thousand, the neutrophils range between sixty and seventy per cent with a left shift of twelve to fifteen per cent. If severe, or if abscess or gangrene is present, the whole cell count may rise to twenty or thirty thousand, the left shift to forty per cent or higher and the neutrophils to eighty or ninety per cent, with a definite increase in juveniles and myelocytes. The leucocyte picture, therefore, is not only an aid in diagnosis but of prognostic import."

The prognosis is in proportion, first, to the time when the patient is seen; second, the type encountered; third, the amount of home treatment, including purgation; and fourth, the condition of patient immediately prior to operation. Undue delay from whatever cause is dangerous and the time factor is most important. The diagnosis of atypical acute appendicitis is usually not difficult. However, we know that quite a few intra- as well as extra-abdominal conditions may simulate appendicitis. To mention only a few, not infrequently, pneumonia, lead poisoning, renal colic, allergy, rheumatic infections, gastro-intestinal diseases, acute pyelitis, especially in females, intussusception, mesenteric adenitis, and in adolescent girls, ovarian dysfunction. Bastianelli once stated, "When physicians are discussing whether the case is appendicitis or not, it is; when they are inclined to admit the possibility of appendicitis without being perfectly sure, it not only is, but is about to perforate; when the diagnosis is sure, there is already perforation and more or less peritonitis." The above quotation is perhaps hard boiled, but it does point out the danger of delay.

The treatment is always surgical. It is true many cases present subsiding symptoms and the patient apparently recovers on rest, no food, ice bags, etc. Nevertheless, surgery will be needed later in many cases. I don't know how safe interval waiting is. I think it is a question of judgment on the part of the surgeon and the evaluation of the sum total of what the internist knows concerning the past status of the patient. After all, there may be more truth than poetry in the old expression, "My doctor knows my constitution." The responsibility is a joint one on the part of the attending physician and the surgeon. I have never been sorry that I advocated operation or



supported the surgeon in his opinion. Time after time such action has been proven more than wise. On the other hand, I have been sorry on a few occasions that I temporized. Gatch, Gerry, and Ballenger (J.A.M.A., May 11, 1940) advocate early operation in the so-called late or advanced appendicitis, under which head they group:

A. Cases without gangrene or suppuration.

B. Cases with gangrene or suppuration but without perforation or with early perforation.

C. Cases with gangrene and perforation, or with perforation and abscess.

In such cases they advocate immediate blood transfusion. They present evidence for their belief that peritonitis with symptoms attributed to toxemia are, in a large measure, due to loss of protein by the blood. The control of body fluids is a most important measure of post-operative treatment. Haggard and Kirtley (J.A.M.A., May 11, 1940) remind us that the most serious mistake a physician makes is in thinking that the patient, although ill with appendicitis, is hardly ill enough to be operated on. No case, provided it is appendicitis, is too mild for operation.

In conclusion, it is well to emphasize the following:

First: To reduce the mortality, the incidence of appendicitis must be reduced. Herein lies the problem, for the question naturally arises, how can it be reduced?

Second: Remember the value of an accurate and carefully obtained history, even the close attention to details.

Third: A thorough examination, including immediate blood and urine, securing the child's confidence and causing as little discomfort as possible.

Fourth: Bear in mind that a few extra- and quite a few intra-abdominal conditions may simulate acute appendicitis.

Fifth: That fully fifty per cent of surgical emergencies in childhood are those of the appendix.

Sixth: Time is the most important factor, procrastination is ever a danger. Point out the obvious fact that once the diagnosis is established, surgery is imperative.

Seventh: Certain cases will call for either the interval operation or the awaiting of a more favorable time to do surgery.

Eighth: Avoid the use of opiates unless absolutely sure of diagnosis. Blood trans-

fusion, glucose, saline, and even oxygen are at times of great value in pre-operative care.

Ninth: Do not rely entirely on a single blood count. Repeat in a few hours if necessary and rely on clinical findings.

Tenth: Lastly, remember the responsibility is that of the internist as well as that of the surgeon.

#### DISCUSSION

**Charles A. Vance**, Lexington: I first read the paper with a great deal of pleasure, and then I listened to it with more pleasure. It is a very timely subject, and I think we should have a paper like that every few years.

I cannot disagree with Dr. Pritchett on anything. I was especially struck with what Dr. Bastianelli said, I had never seen that quotation before, but I thought it was a fine one and everybody ought to know something about it.

I saw a case yesterday morning of a girl five years old who was stricken with pain last Thursday night. Her folks didn't call a doctor, they consulted the druggist, who said she might have worms, so they gave her some worm medicine and dewormed her, and then they gave her castor oil and salts, and a doctor was called yesterday morning about seven or eight o'clock. She came down here from about forty miles. She had 23,000 leukocytes, with 95 per cent polymorphonuclears and 30 per cent non-segmented cells, and she had a perforated, gangrenous appendix with generalized peritonitis. That is the typical sort of case you get that is treated that way.

The cases with which I have had the most trouble in diagnosis are the cases of pyelitis. I have looked at those long and at great length and many times I have not known what to do with them, but I believe it is much better, if you are not sure about the appendix being involved, to take out a normal appendix than to leave one in that might cause trouble.

I was reminded that in 1926 I read a paper at the Frankfort meeting on "Appendicitis In Children, with Especial Reference to the Importance of Early Diagnosis." I won't read this paper of course, but I was struck forcibly with this fact that we have not changed much in the diagnosis and treatment of this condition in the fourteen years since I read that paper.

**Wallace Frank**, Louisville: Dr. Pritchett's paper has a great deal of meat in it and very little wordy material, so much so that it is rather hard to take it all in just by listening.

There are one or two things I wish to emphasize. In the first place, children do not tolerate acute appendicitis. Dr. Pritchett gave the reasons. Children have a short omentum, and, after all, the omentum gives the abdomen its protection. In the second place, the appendix

is simply a mass of lymphoid tissue which corresponds, almost, to an abdominal tonsil, one might say. We see a number of cases of abdominal pain in children who have upper respiratory infections, and a great many of them go on to perforation of the appendix, peritonitis, and death, because the possibility of an associated appendicitis is not appreciated.

I must say that I disagree with him about the value of rectal examination. After all, an acute appendicitis is one of the hardest things I know to diagnose, and it is one of the trickiest. The symptoms of the typical case can be interpreted by a medical student, but the findings in the atypical cases lead one astray.

I agree with what Dr. Vance said: if you are in doubt, and especially if it were my child, I would much prefer to have a normal appendix taken out than to have a correct diagnosis arrived at and the baby lost. In cases where the appendix is in the pelvis, the symptoms are not typical, and often rectal examination will reveal an indurated area high up on the right side. This is also true of those appendices that extend under the promontory of the sacrum, the tip of the appendix being in the left side and the pain in the left side, however when you examine rectally you can find a mass which leads you to the correct diagnosis.

This is an important paper. The mortality of appendicitis is much too great. There is a drive on all over the country to lessen it, and, as was taught in the beginning, we must now learn over again: once the diagnosis is made, operate; there is no temporizing with this disease.

**J. Garland Sherrill**, Louisville: This is a well-known topic with which I am more or less familiar. Also, I wish to say that forty years ago I made my maiden bow at this Association.

My opinions about appendicitis are fixed and it is always appendicitis when you begin to talk about appendicitis or appendicitis.

Purgative seems to be a "sine qua non" among the laity. Leave it alone. Do without it! I think all the papers and radio talks should stop advertising purgatives; they are not necessary. (Applause)

One of the main difficulties in making a diagnosis is to eliminate the possibility of a pneumonia. On one or two occasions I have found a pneumonia and found that the appendix was not involved without operating. On one occasion I lost a patient operated upon for appendicitis, because I didn't know the patient had pneumonia. Beware of the appendicitis case that has 34,000 to 40,000 leukocytes. Be careful of one you think is a chronic appendicitis; it doesn't exist in children. An appendicitis in a child is nearly always active and acute, and it doesn't come from something he has eaten,

either. It comes from infection either in the throat or in the gut. It comes from blocking of the material in the appendix, and it comes like lightning; a sudden abdominal pain beginning at the navel and spreading to the right side, with vomiting, is almost proof positive of what you have. Don't delay for scientific examinations of the blood. It is all right to take a blood count, but I wouldn't stop a minute waiting for one.

The rectal examination is good, as Dr. Frank and Dr. Pritchett have said, in some instances. It is no trouble to examine the rectum of a child if you do it gently, and all your movements in the child should be gentle. If you have a left-sided pain in a child with a rigid abdomen, look out, it is a pelvic-bound or pelvic-lying appendix. When you make up your mind you have appendicitis, gentlemen, don't delay one minute and you won't lose any patients.

In 1904 in Birmingham I asked the profession to set a standard on which we could all work, a platform on which we could all stand. My paper was six pages and the rest of the discussion was about fifteen more. Murphy closed the thing when he said: "I have saved twenty-two cases out of twenty-three of acute, perforated spreading peritonitis," and the mortality dropped immediately after that debate, down to practically nil. Now you boys are learning what we learned forty years ago by hard knocks; you are learning it now from the experience of others. But the mortality that is claimed over this country is from eleven to fifteen per cent in acute appendicitis, and it should never be that high. Therefore, I say, gentlemen, when you have an appendicitis, make your diagnosis with the doctor, don't fiddle around. I have always demanded consultation in person, not going to see the patient and telling me what you think of him, but come see him with me, make your diagnosis, and then operate.

**Woolfolk Barrow**, Lexington: In a recent analysis of a series of consecutive cases with acute appendicitis, we found that the mortality rate in children was just twice that of the rest of the series. In 1,039 cases with acute appendicitis seen in the Charity Hospital of New Orleans, the mortality rate for patients between ten and and sixty years of age was four per cent, the mortality rate for patients less than ten years old was a little over eight per cent. On further analysis of those patients we found some interesting figures. In the first place, there were no deaths in patients less than ten years of age who had their appendix removed before perforation had occurred.

In the second place, we found that this increased mortality rate of acute appendicitis was correlated more closely to the increased incidence of appendiceal peritonitis than any



other single factor. All deaths occurring in this age group occurred in those patients in whom perforation of the appendix had occurred at the time of entry. Indeed, the instance of appendiceal peritonitis in patients under five years of age was 73 per cent and between five and ten years of age 25.3 per cent. In other words, if appendiceal peritonitis could be eliminated there would be no appendicitis question. The reasons for this increased mortality rate as well as the increase in percentage of patients with perforation at the time of entry in children are not entirely clear, but the inherent difficulty in making diagnosis of acute appendicitis in young people due to atypical symptoms and the greater number of confusing non-surgical symptoms commonly found in childhood with the increased difficulty in differential diagnosis are largely responsible. And because the diagnosis of acute appendicitis is so difficult to make on clinical grounds alone, in children, we become firmly convinced by this analysis that the vermiform process should be suspected as the cause of abdominal pain in any patient regardless of age, unless it can be definitely excluded, even if exploratory laparotomy is necessary to do so.

**A. D. Willmoth, Louisville:** The question of appendicitis in children is always one of intense interest, because it carries with it the thought that you cannot control the mothers in giving these children various forms of purgatives in order to relieve what they believe to be an acute indigestion from something that the child has eaten a day or so before. They give them one or two or three various forms of purgatives, and then when it doesn't relieve, they bring them into the hospital for the surgeon to see. The result is that we see them in rather the late stages, and when you take into consideration the child with the lymphoid tissue, the tonsils, the adenoids and what not involved at that age in life, you can consider that probably the appendix is the offending organ.

In the little child there are two things we have to think about. One is intussusception and the other is appendicitis. Children don't have the other conditions that we see in older people, so you are perfectly safe in guessing that it is an appendix. As one of the speakers said to you, beware of the child who is brought in with a high white blood count and with a high stab count. Whenever the stab count runs above nineteen or twenty, that child doesn't have appendicitis, it has something else the matter with it, and be slow about arriving at a conclusion. When the pathologist reports to you that the child has fourteen, fifteen, sixteen, seventeen stab count, with a certain amount of abdominal disturbance, you are perfectly safe in going in on an appendix, and you won't miss it one

time in a hundred.

I have often thought of the teaching that was given to me by the late Dr. John B. Deaver when he said: "If there is any delay about making the blood count you can make it tomorrow. Operate today and make the blood count tomorrow." I fully agree with that, even today— if there is any delay about the blood count, go ahead and operate on your child, you won't make any mistake, it is the appendix. The pain may be referred here and there over the abdomen. The location of the pain has very little to do with it, in a way; the blood count and the fact that the child was taken suddenly ill are the things you should use to operate. Open the abdomen and take out an acute appendix, and when you do, you lower the blood count.

We must educate the public to the point where they will not give purgatives to children. You can't tell the poor mother that she has killed her child by giving it castor oil and various other forms of purgatives. She is bereaved enough that the child is going to die or has died, but the fact still remains that she gave that child one, two, three or four purgatives before she was willing to call a doctor and admit it to a hospital for surgical relief. Until we can do what they have done in Philadelphia we won't see much change. If you don't think it is hard to get a purgative or a pill in Philadelphia, try it in a drug store. I did. The druggist won't sell you one. Why? Because the doctors asked the druggists to cooperate with them, to the extent that they wouldn't sell people purgative over the counter. Try to buy one and see if you can get it. You can't even get Sal Hepatica in Philadelphia. I have tried it. Until we have reached that stage we are always going to have the little patients that the mothers, with all good intentions, of course—no one condemns the mother—have given castor oil, Syrup of Pepsin, a little of this and a little of that, and then when the belly doesn't get easy they call the doctor, and when they get the child into the hospital it has an appendix that has been there two, three or four days. Until we can eliminate that, there is little hope of lowering the mortality.

**A. T. McCormack, Louisville:** I note the presence in the room of a number of our health officers, and I want to call their attention to this discussion. In the child health conferences that you are holding, together with your local physicians, I think it is of the utmost importance that the statements you have heard made here should be repeated to the mothers of well children as often as possible—not to give purgatives but to send for the doctor when the child has a pain in the belly. That is one of the ways we can help in education, and the most important thing we have to do as public health officials is to train people that when they are sick they must not make self-diagnosis, (it is hard

enough for a doctor to do that), and must not treat their babies, but send for the doctor early when there is not too much the matter, and then we will get our babies well. If we can do that as health officials we will help tremendously in lowering the death rate from appendicitis, and not only from appendicitis, but from every other thing, because when people are sick is the time to send for the doctor.

Mr. President, if you will permit me while I am before the microphone, I want to say first that the United States Public Health Service Hospital located here in Lexington is one of the unique institutions of the medical world. Men come here, or they did as long as they could get here, from every civilized country on the globe. I attended one meeting out there when twenty-seven nations were represented; the whole profession of Lexington was there, but outside of Lexington there were very few men from the United States. It is a unique institution; it is a rare opportunity to see it, and they are going to serve us a dinner out there tonight to which they have invited us.

**James H. Pritchett**, (in closing): I wish to thank the men for their discussion. I have always been of the impression that a paper is of value only in so far as it provokes discussion.

If I read aright from the remarks of the surgeons, their central thought is "Call us early." As a matter of fact, the internist is behind the eight-ball always. If we see the case first and if we delay too long, the chance of the patient's getting an early operation is lessened considerably.

I agree with all that has been said. I still insist, however, that the question of purgatives has not been settled. You know and I know and the profession knows, likewise the nursing profession knows, the great danger of purgation in children at any and all times, but when the radio continues to advertise by way of the air waves the great value of how well Syrup of Pepsin and Castoria, etc., do the job, we know there will be a chance for some misguided mother to purge a child and then call the doctor. I think the child's entire chance depends upon whether there is first purgation or the physician.

#### **Routine Tuberculin Patch Testing in Infancy.**

—Bivings believes that tuberculin patch testing of all infants reaching 1 year of age would uncover many heretofore unsuspected sources of tuberculous infection, such as in nurses, especially Negro. It should not be regarded as final evidence when negative but should be followed by 0.1 mg. of old tuberculin intracutaneously in suspected cases. Because of its simplicity and safety and lack of pain it would make an excellent substitute for the primary test in all cases.

## **EDEMA, TYPES AND MANAGEMENT**

L. T. MINISH, M. D.

Frankfort

Edema may be comprehensively defined as an abnormal accumulation of fluid in the interstitial, or extracellular, spaces of the body; either local or general. A discussion of the mechanisms of the occurrence leads one to the broader consideration of water balance within the body, since edema may be designated a positive derangement of this balance in contradistinction to dehydration, a negative balance. Water, by the estimate of Gamble, of Johns Hopkins Hospital, constitutes about 70 per cent of the body weight. 50 per cent of body weight is intracellular fluid that must be maintained at a constant level for life to exist; another 5 per cent is accounted for by blood plasma volume which is, in the normal individual, subject to minor but readily compensable variations by decreasing or increasing interstitial fluid which normally makes up 15 per cent of the body weight. The interstitial fluid, then, is the reservoir that maintains intracellular fluid volume and plasma volume at normal levels. It is with the overfilling of this reservoir that this paper deals.

The normal interchange of fluid between the vascular system and the interstitial spaces is dependent upon several factors. The two major factors are capillary blood pressure, which varies between 35 and 13 mm. of mercury, and is higher in the arterial side of the capillary loop; and colloid osmotic pressure, or oncotic pressure, which approximates 25 mm. of mercury, and is dependent upon plasma proteins, principally albumin. These combined physical forces cause fluid to enter the tissue space from the arterial capillary where capillary blood pressure is greater than the intravascular osmotic pressure, and, conversely, to enter the venous capillary where the reverse relationship exists. The normal function of this system depends upon a third factor, an intact, semipermeable membrane, the capillary wall. A fourth physical factor in removal of fluid from the reservoir is lymphatic drainage. The physiological balance of these mechanisms may be altered by numerous factors, some of which will be enumerated. An example of chemical influence is that of sodium chloride, since with an increased intake of salt, water is retained to maintain an isotonic level, and on a low sodium chloride intake there occurs increased water elimination. A lowering of blood hydrogen



ion concentration results in imbibition of water by red blood cells at the expense of plasma volume; this then draws upon the interstitial reservoir for replacement; conversely, increased alkalinity tends toward edema formation. Another factor of some importance in the distribution of edema fluid is the tension of local tissues. This is evidenced by the frequent appearance of edema in the loosely held tissues of the lower eye-lid.

Edema, therefore, may occur whenever a derangement of one or more of these basic mechanisms is a part of the underlying pathology of disease. The clinical associations of edema are many, so it would be well to consider clinical states of which it is a prominent part in the light of the basic factors influencing water balance that are involved.

Edema due to an increase in capillary blood pressure occurs in congestive heart failure, with thrombophlebitis, varicosities, prolonged dependency of extremities, local heat, and in vasodilatation secondary to neurological lesions. This type of causation accounts for the great majority of cases seen clinically. It is of interest in this connection to refer to a recent study of the clinical significance of bilateral edema of the lower extremities, by Paul D. White and his associates in the Massachusetts General Hospital. It was found, after careful study, that the primary cause of edema in 100 ambulant patients, selected by the one criterion of bilateral edema of the legs, was varicose veins in 56 patients. Of these 31 were obese, while 25 were not. Only 13 of the patients presented edema due to heart failure while the remainder of the cases fell into a miscellaneous group of causes including obesity alone, renal diseases, cirrhosis of the liver, and nutritional edema. A control series of 100 bed patients selected by the same criterion revealed the edema to be due to congestive failure in 60 cases. This was anticipated, since only the sicker patients were bed patients in the hospital. These findings point out the fallacy of the common assumption that most edema of the legs is evidence of heart disease; and the above conclusions clearly indicate that edema, even when associated with dyspnoea in an ambulant patient, is not necessarily evidence of a cardiac disease, and show that it is much more probably due to varicosities, obesity, postural factors, or a combination of these relatively benign causes. Any discussion of treatment of this type of edema should then be predicated on a careful and accurate diagnosis. Bed rest and digitalis remain the sheet anchor in the management of cardiac decompensa-

tion and its attendant edema. Therapy may be augmented in acute respiratory distress by hypertonic glucose or sucrose given in a 50 per cent solution intravenously, phlebotomy, and thoracic or abdominal paracentesis where an accumulation of fluid in the serous cavities is a distressing mechanical factor. In less urgent cases, along with limitation of water and salt intake, diuretics can be used efficaciously. Ammonium chloride is effective but often not well tolerated, the theobromine derivatives are better tolerated but less effective. The mercurial diuretics have been found to be especially effective when given intravenously and may be apparently continued over long periods of time even in the presence of moderate renal insufficiency without untoward effect. It is well to recall that these agents are capable of producing necrosis of soft tissue, so great care must be exercised in their administration; for this reason intramuscular use seems ill-advised except in unusual cases. I have used mercurial suppositories per rectum with satisfactory results in some cases. It is remembered that calomel produces drastic dehydration and that every doctor of the preceding generation depended upon it in heart disease and nephritis. The milder saline cathartics may still be used for this purpose. The more benign type of edema in this category should be approached from the standpoint of correcting or controlling the etiologically important factors, that is, through obliteration of varicosities by sclerosing injections, weight-reducing diets in obesity, and elastic stockings, and elevation of the extremity for the control of edema secondary to venous obstruction and neuropathies.

Edema due to a decreased oncotic pressure resulting from a deficient plasma protein is less commonly seen clinically yet none-the-less constitutes the etiological factor in a large number of cases. The important protein is serum albumin which has a smaller molecule than serum globulin and fibrinogen and is consequently of far greater importance in colloid osmotic pressure. Alteration of this factor, which may occur from several causes, may be suspected clinically, and may be demonstrated in the laboratory. The total protein of the blood plasma may be determined, the normal range being 6 to 8 Gm. per 100cc., and a value below 5.5 Gm. is considered sufficient deficiency to produce "nutritional" or "nephrotic" edema. In these cases a separate determination of albumin and globulin fractions will reveal an alteration of the normal albumin-globulin ratio of three to one toward lowered values of albumin, demonstrating the loss of the

more important smaller protein molecule. Another satisfactory method of determining this deficiency is to measure the specific gravity of the blood serum or blood plasma, values below 1.018 and 1.023, respectively, indicating deficiency sufficient to produce edema. The clinical associations are many; there may be loss of albumin occurring in the urine in nephrosis and chronic active nephritis, or in ascitic fluid due to cirrhosis of the liver or to other encroachments on portal circulation where repeated abdominal tapping is necessary. The deficiency of protein may be due to inadequate protein intake because of dietary restrictions, or because of poor absorption associated with gastrointestinal disease. Another factor probably operative in liver disease, infections, nephritis, and anemia, is impaired synthesis of plasma protein. Rapid dilution of the blood plasma with resulting lowered protein levels may occur following severe hemorrhage or in rapid recovery from dehydration. Therapeutic measures in this type of edema must be aimed where possible at the ultimate causative factor. Other more general measures, which yield variable degrees of clinical improvement, are high protein diet, and transfusion of whole blood, particularly in the presence of anemia. A more rational procedure where anemia is not a factor is transfusion with plasma only, since this does not increase the cellular elements of the blood. Plasma transfusions are most available in the larger hospitals where blood banks are maintained and where the plasma from several sources can be pooled. Again diuretics are useful in delivering excess fluid except in those cases where the edema is due to albumin lost by way of the urine. Concerning nephritic edema, an interesting article appeared in the June 29th issue of the A. M. A. Journal by Dr. Goudsmith, of Philadelphia, and Dr. Binger of Rochester, Minnesota. The regimen of treatment presented by them appears to be successful in 90% of the severe types of cases. It consists of rest in bed, a salt-free, high protein diet, restriction of fluids, the oral administration of potassium nitrate and the intravenous injection of 6 per cent solution of acacia in 0.06 per cent sodium chloride.

Edema due to increased capillary permeability which allows the passage of protein into the tissue spaces and thus reduces effective oncotic pressure, is exemplified by the local swelling of thermal, chemical, and physical trauma and of inflammation. Capillary changes are probably also at play in the edema of the acute stage of glomerulo-nephritis, and in cardiac

decompensation where local anoxemia, as reflected by cyanosis, occurs. The local edema or urticaria of allergy, which responds so dramatically to epinephrine, is another example of a change in capillary permeability.

Edema resulting from inadequate lymphatic drainage as is seen in elephantiasis and often following radical mastectomy is included for the sake of completeness.

It is readily apparent that a complication of these several factors may be operative in any single case, hence it may require rather arduous study and observation to properly evaluate individual cases.

This paper has presented nothing that is new; however, it has been an attempt to correlate the known factors influencing the formation of edema with the clinical entities of which it is a sign, and to indicate a rational therapy directed to the alleviation or control of a most distressing concomitant of many disease processes.

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### OSMOTIC DRAINAGE IN TRAUMATIC SURGICAL PRACTICE

DARREL L. VAUGHN, M. D.

Morganfield

After perusal of such literature as is available to me, I find little mention of fluid reversal or osmotic drainage in general surgical practice other than in the treatment of acute appendicitis with perforation, in certain bladder conditions, and in the treatment of burns. Due to the fact that such a hygroscopic substance as glycerine is capable of reversing fluid flow and thus preventing the absorption of toxins due to degenerating tissue or infection, it has proven to be of great value in the treatment of these cases in my practice.

The theory of fluid reversal is sound and when used in conjunction with sulfanilamide it allows the injured tissue to be constantly bathed with the sulfanilamide containing tissue fluid, the flow at all times being from within the wound outward into the dressing. Consequently, infection is diminished by this constant cleansing and a quicker recovery is possible. In writing, I have in mind the possibility of assistants being able to prepare



war wounds for transportation by the application of glycerine soaked dressings which will cleanse the wound while the patient is being transported to a base hospital for proper attention, all the while arresting infection.

It is interesting to state also that in a number of compound fractures treated in this manner, to this time I have had no disappointing results providing the wounds are cleansed properly and kept constantly bathed in the glycerine. If the dressing is not kept freshly soaked at all times, the effect of treatment will be lost.

One case which has proven of interest is that of N. B., age 12, who received shotgun wound of the right arm, the discharge carrying away all tissue from above the elbow to the shoulder with splintering of the humerus. The injury was so extensive that had the boy not been a personal friend, the arm would surely have been removed without further ado. A thorough debridement was done and notched penrose drains placed on either side of the bone extending the full length of the injury and the wound carefully packed with compresses soaked in sterile glycerine. Fresh glycerine was supplied to the wound every two hours for several days, then drains removed. Until thorough healing occurred a glycerine soaked dressing was kept constantly on the wound. Maximum temperature rise was 100.2 on third day and normal healing progressed rapidly leaving a satisfactory scar. Total number of hospital days were 21. Patient returned to school at end of thirty days.

N. C., age 37, received compound comminuted fracture of right tibia in a truck accident. Patient was brought to my hospital where fracture was reduced, wound extended, and debridement carefully done. A notched catheter was placed on either side of the bone in the base of the wound, edges approximated as near as possible, wound covered with a small piece of gum rubber sheeting, taped in place, and cast applied with the rubber tubes brought through the cast. Slits were made in the cast over the wound for the glycerine to drain through and the wound irrigated with sterile glycerine every two hours through the catheters. Since there was no temperature rise, the catheters were removed at the end of the seventh day and the patient returned home. Six weeks later cast was removed and wound found to be satisfactorily healed. He returned to work at the end of eight weeks.

Tetanus and gas gangrene anti-toxin were administered in both cases.

Since becoming interested in this work,

I have been applying glycerine soaked pads to all abdominal incisions, infected wounds, and in other cases that the opportunity presents itself for this type of treatment. I do not know whether this application of osmotic drainage is original with me or not, but I do know that it is effective and invite members of the profession to try this for more thorough study of the method.

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## PEPTIC ULCER WITH UNUSUAL DEVELOPMENTS

MORRIS FLEXNER, M. D.

Louisville

In medicine, as in other walks of life, to be forewarned is to be fore-armed, under ordinary circumstances. In the case I am about to report, being forewarned probably served as somewhat of a handicap to the patient.

**HISTORY:** The patient is a male, age 50, seen April 1st, 1940. He was referred to me by Dr. Thomas Wallace of this city. Chief complaint: Distention in the lower abdomen with repeated attacks of nausea and vomiting. He was first seen by Dr. Wallace in October, 1939 because of epigastric pain which had gradually grown worse over a period of a year. The pain appeared about an hour or two after eating and was relieved by alkalies. He was placed on a diet and took some white powders before and after meals; he did very well until February 14, 1940 when in Hopkinsville he had a severe attack of nausea and vomiting lasting several hours, and finally ended with coffee ground vomitus. The first stools he had following this attack were tarry in color; since that time there were no other such stools and no blood in his vomitus. However, he still suffered from heartburn and belching, getting nauseated frequently; at times inducing vomiting to get relief. At no time had there been any real pain.

His personal history is of little consequence and has no bearing on the present condition. There had been no severe illnesses, no surgery and no injuries. Cardio-respiratory history showed frequent attacks of colds with deep coughs. The past few months there had been dyspnea and palpitation on walking up a flight of stairs; there was never any precordial pain and no edema. The nervous history was essentially normal; the patient was not of a nervous temperament, was well balanced, sleeping well, and not depressed.



Genitourinary system essentially negative.

**HABITS:** He had been on an adequate diet for six months and had had no alcohol for the past six months. He was a pipe smoker, using "long green;" when not smoking, he occasionally chewed tobacco. His maximum weight was 155 lbs. in 1939; he thinks he lost 20 pounds in the past six months. At times he became easily exhausted.

**PHYSICAL EXAMINATION:** Temperature 98  $\frac{4}{5}$  degrees, pulse 68, blood pressure 120/70, weight 129 pounds. Patient is small in stature, moderately developed and no evidences of recent loss in weight claimed. Color good and the skin clear. The eyes react to light and accommodation. The teeth need cleaning badly; there are a few missing; the occlusion of the molars is poor; there is some recession of the gums. The tonsils are two plus and look chronically infected. The anterior cervical glands are definitely enlarged. The thyroid is normal. The sinuses are beautifully clear. The lungs are clear on percussion and auscultation. Fluoroscopic examination: There are heavy root shadows in the left; there are no rales. The heart is not enlarged; the sounds are of good muscle tones at the apex and base; there are no murmurs, the aortic knob is slightly plus; the vessel shadows are not wide. The abdomen is not distended; the walls are soft. The liver is at the costal margin and the spleen is not felt. There are no masses. There is some tenderness over McBurney's and over the entire lower abdomen. There is slight pain in the epigastric region to the right of midline. K K are a little hyper active. Rectal examination: External tabs with suggestion of "sentinal pile;" no fistula opening found. The prostate is small and firm; secretion obtained.

Laboratory examination showed a normal urinalysis; a secondary anemia with a hemoglobin of 78% and 4,120,00 red cells; a normal white count; the Kahn test was negative; the prostatic secretion showed 5 to 7 pus per high power field, and there were no organisms. He was referred to Dr. J. C. Bell for a gastro-intestinal X-ray. The positive findings of this examination were as follows:

The stomach was large, the pyloric portion being definitely dilated. There was considerable fluid present although nothing had been taken by mouth for 14 hours. The stomach itself was normal otherwise. The first portion of the duodenum was markedly deformed at all times, the deformity being in the middle third, characteristic of a duodenal ulcer. A shadow

decidedly suggestive of the crater could be seen in the middle third of the duodenal cap. There was marked narrowing of the lumen in this area.

At the five hour period approximately 30% of the opaque material was still in the stomach. The head of the barium column was in the transverse colon. The cecum was thought to be normal.

The patient was placed on an ulcer diet with an antispasmodic before meals and an antacid one hour after meals; he was given cevitic acid, 50 milligrams three times a day, and taken off his tobacco.

In two weeks he reported back and felt immensely better; having gained 5½ pounds. Two weeks later he again reported, having gained another 5 pounds. His only complaint was that the antacid caused some constipation. The patient was referred back to Dr. Wallace and was not seen again until 3 a. m. eight days later. The subsequent history was:

Four days after I had last seen him, he had a vomiting spell at 5 p. m., there being no food in the vomitus. He was relieved but did not feel well. The following three days he worked, complained somewhat of feeling tired, but took his regular diet on the night of his illness, eating broiled tenderloin of beef, carrots and toast, but did not take his usual milk. His wife said he had no fever that evening. About nine o'clock that evening he complained of slight general abdominal pain. He sat on the open porch until 10:15, went to bed and to sleep. At 12:30 he awakened and had a violent vomiting spell with no blood. He was in great pain after the vomiting and Dr. Wallace was called. He must have felt extremely ill after the attack as he told his wife he "thought he was gone." Dr. Wallace gave him a  $\frac{1}{4}$  gr. of morphine with little or no relief and followed this with two enemas. I saw him at 3 a. m., May 9th sitting up in bed breathing in a jerky fashion in extreme pain. His pulse was good quality, his color good, and he did not seem in shock. He referred the pain to his whole abdomen, placing his hand over his epigastrium saying it "felt like something had given away." His abdomen was board-like and because of his epigastric pain it was difficult for him to take a deep breath. Knowing what I did about his condition, to me the clinical picture was without doubt one of perforated duodenal ulcer. I told Dr. Wallace I felt this to be the case and advised having a surgeon see him at once. Dr. M. J. Henry was selected and the patient sent to St. Joseph's Infirmary.

EPIDEMIOLOGY OF DIPHTHERIA

CHARLES D. CAWOOD, M. D.

Lexington

In discussing the epidemiology of diphtheria before this association, I will omit the bacteriology and pathology pertaining to the disease, due to your familiarity with these subjects, and limit this paper to a few actual epidemiological observations made during the past ten years in the City of Lexington and Fayette County.

The prevention and control of diphtheria is both a statutory and a community obligation on the part of the local Board of Health and its agent, the Health Department, as well as the local medical profession. It is impossible to control the disease without co-operation and understanding on the part of the local medical profession and the public at large. The Board of Health and its agent, working on a definite scheduled eradication program, together with the private practitioner can reduce this disease to a minimum and prevent all epidemics and thereby preserve the health of our children.

The control of communicable diseases is different in each instance. Each disease presents its own particular problems and calls for the most rational method of attack. Three definite factors must be present in order for diphtheria to occur: a susceptible person, a source of infection, and a favorable portal of entry for the infectious agent.

Armed with these basic principles with regard to this disease, let us now review the diphtheria problem in this community from a morbidity standpoint during the period 1930-39.

TABLE I  
Diphtheria Cases by Age Groups  
1930-39

Age Group	Year										
	30	31	32	33	34	35	36	37	38	39	
0-5	11	23	20	27	28	21	18	17	9	7	
5-9	23	43	31	41	47	32	9	5	2	3	
10-14	5	6	12	13	17	2	6	2	0	1	
15-19	2	0	4	7	9	2	2	0	0	0	
20-24	1	0	3	3	10	2	1	2	0	0	
25-29	3	1	6	4	1	5	4	1	0	0	
30-34	0	5	6	6	5	7	0	0	1	0	
35-	0	0	0	0	0	0	0	0	0	0	
Total	45	78	82	101	117	71	40	27	12	11	

These studies indicate an increasing number of cases during the period 1930-34 followed by a decline in the 1935-39 period. It was observed that 414 of the 584 cases, or seventy per cent of all cases,

occurred in the two age groups, 0-5 and 5-9. It appears, therefore that the major problem for the community, in reducing the incidence of this disease, is the control of diphtheria in children in the first nine years of life. A little later in this paper, factors that may have caused the reduction of the incidence of cases in the 1935-39 period will be pointed out.

TABLE II  
Seasonal Distribution of Cases  
1931-39

Month	Cases	Average	Percent Total
Jan.	66	9	*11.3
Feb.	41	4	7.0
Mar.	36	4	6.1
April	23	2	3.9
May	18	2	3.0
June	9	1	1.5
July	6	6	1.0
Aug.	22	2	3.7
Sept.	48	5	*8.7
Oct.	140	15	*23.9
Nov.	116	12	*19.8
Dec.	59	6	*10.1
Total	584	62	100.0

This study illustrates the fact that diphtheria occurs in this community during any month, but the greatest incidence is during the fall and early winter. It is further observed that, on the average, 62 cases per year can be considered normal for this locality and the table also indicates the normal incidence by months. Given these facts, a health officer can immediately determine whether or not this disease is epidemic during any given month or in any year.

SUSCEPTIBILITY

We have reviewed the factors necessary for diphtheria to occur. The first of these factors was a susceptible host. It is an established fact that the natural process of immunization against diphtheria in a population goes on through contact with carriers and sub-clinical cases. Nevertheless, many children apparently remain who are susceptible to the infection. It seemed to the Board of Health in 1934, that an effort should be made to determine the effectiveness of Toxin-Antitoxin by means of confirmatory Schick test survey. Out of a total of 584 cases of diphtheria observed in the 1930-39 period, thirty-two cases occurred among previously immunized children. Of these thirty-two cases of diphtheria, twenty-eight had received Toxin-Antitoxin prior to the onset of the disease.

Read before the Kentucky State Medical Association, Lexington, September 16-19, 1940.



TABLE III  
Schick Tests of 2,245 Children  
(6 months to 10 years)  
1934

Items	Total Tested	Positive		Negative	
		No.	Percent	No.	Percent
Previously inoculated	1,442	336	23.3	1,106	76.7
Not previously inoculated	1,003	403	40.2	600	59.8

Of the 1,442 children included in this survey, who had previously been inoculated, 1,106, or 76.7 per cent, revealed negative reactions, indicating sufficient immunity to prevent them from developing the disease; 336, or 23.3 per cent of those tested were still susceptible, as indicated by a positive Schick test. In a control group of 1,003 children, who gave histories of not having been previously inoculated 403 or 40.2 per cent revealed positive reactions and 59.8 per cent negative Schick tests.

In 1938, another Schick test survey was made by the local Health Department to determine the relative value of two doses of Alum Precipitated Toxoid in increasing the immunity of the population between the ages of six months and nine years. The Schick test was given to 1,109 children prior to the administration of Toxoid and to 895 who were subsequently checked for confirmation of immunity.

TABLE IV  
Schick Tests of 1,109 Children  
Ages 6 months to 10 Years

Items	Total Tested	Positive		Negative	
		No.	Percent	No.	Percent
Before Toxoid	1,109	676	61.0	433	39.0
After Toxoid	895	27	3.0	868	97.0

Our studies showed that 676 non-immunized children, or 61 per cent gave positive Schick reactions and 39 per cent had negative reactions. After Toxoid was administered, 895 of these children were re-tested and only 27, or 3 per cent gave positive reactions while 97 per cent were immune, on the basis of negative Schick tests.

According to these figures, the susceptible child population is greatest under six years of age and they can be more effectively protected by artificial immunization with two doses of Alum Precipitated Toxoid than with three doses of Toxin-Antitoxin. With these observations in mind, and since we have a great many children to protect and an inadequate personnel for adequate follow-up, we have discontinued Schick testing as an impractical procedure under local cir-

cumstances. We have found that over 70 per cent of the children under six years of age are susceptible to diphtheria and above this age susceptibility decreases each year. However, we realize the usefulness of the Schick test, as well as its practicability in the hands of the private practitioner.

The natural protection acquired by the local child population, supplemented with artificial immunity conferred through the use of preventive biologicals administered by the local medical profession and the Health Department, breaks one of the links of the triangle necessary for this disease to occur. Since 1935, only four cases of diphtheria have been diagnosed in children who had previously received two doses of Alum Precipitated Toxoid. This is a very small number when we realize that over 5,000 children have been inoculated with this preparation.

At this time, it seems logical to point out the relationship between the immunity status in children under six years of age in our population and the local incidence of diphtheria. It is obvious that, if immunization is effective, as the immunity status increases the case incidence should decrease.

TABLE V  
Diphtheria Immunity Status by Years  
1930-39

Year	Total Protected	Percent Protected
1930	760	14.04
1931	920	16.65
1932	975	17.30
1933	1,050	18.20
1934	1,125	19.22
1935	1,260	21.13
1936	2,143	32.0
1937	2,722	40.7
1938	4,540	67.8
1939	5,685	84.9

TABLE VI  
Diphtheria Cases and Case Rate per 10,000  
Population 1930-39

Year	Cases	Rate
1930	45	6.6
1931	78	11.1
1932	82	11.5
1933	101	13.9
1934	117	15.8
1935	71	9.4
1936	40	5.0
1937	27	3.5
1938	12	1.5
1939	11	1.3

Through the efforts of the local physicians and the Health Department, the immunity status has advanced from 14.04 per cent in 1930 to 84.9 per cent in 1939 in children under six years of age. At the beginning of this discussion, it was pointed out that the morbidity rate in-



creased from 1930 to 1935 and then there was a decided decrease from 15.8 in 1934 to 1.3 per 10,000 population in 1939. It seems logical, then, that increasing the immunity status under 5 years was a major factor.

SOURCE OF INFECTION

It is apparent, from our observations and studies that healthy carriers and sub-clinical cases exist in this county. This is indicated by the many negative Schick tests in non-inoculated children and by bacteriological studies by our laboratory. It would not be practicable for us, with our present staff, to make a general carrier survey, but such a survey has been carried out in other section of this country. Many of our initial cases were definitely proven to have, upon investigation, a healthy carrier as a source of infection.

Another common source of infection is the initial case and its contacts. Upon the receipt of a case report, an immediate investigation is made, and the contacts are cultured and isolated, according to statutory provisions. We have, during the past ten years, observed 584 diphtheria cases, of these 477 were initial and 107 subsequently developed among the 3,336 known contacts. It becomes apparent that these immediate contacts consisted of protected and susceptible individuals. In the children exposed to actual cases, those who had previously been inoculated and those over ten years of age were not given a prophylactic dose of antitoxin. Those children who were under six years of age and who had not been inoculated were, in most instances, given a prophylactic dose of antitoxin thereby conferring temporary protection.

The attack rate for the exposed group is 17.5 per 100, and if this rate had prevailed among the general population there would have occurred 14,000 cases of this disease. This further substantiates the fact that diphtheria inoculation and quarantine of cases and contacts very definitely limits the spread of infection.

It seems that another link of the triangle of factors necessary to produce diphtheria has been broken due to the efforts of the physicians and the Health Department through quarantine of cases, prophylactic protection of children under ten years of age, and the restriction of the movements of extra-familial contacts who were known to have been exposed to actual cases.

PORTAL OF ENTRY

We are cognizant of the fact that the

diphtheria bacillus is most adaptable to the nasal, tonsillar, and pharyngeal membranes. We have not made any studies pertaining to rendering these tissues unfavorable for growth of the diphtheria bacillus. Several studies have been made by various physicians that would indicate diphtheria is less apt to occur among children who have had tonsillectomies. Our present observations will not permit us to either confirm or reject these findings.

MORTALITY STATUS

The deaths that occur among cases of diphtheria are apparently dependent upon three main factors: the virulence of the strain of the diphtheria organism, individual resistance, and the duration of the disease before antitoxin is administered. We are rather fortunate in this county in that the Board of Health has made it possible, through the city and county governments, to provide antitoxin for all cases where there is a lack of funds on the parts of the parents. This means, in many instances, the difference between life and death, and has a decided bearing on the death rate.

TABLE VII

Diphtheria Deaths and Rate Per 100,000  
1931-39

Year	Deaths	Rate
1931	5	7.1
1932	1	1.4
1933	4	5.5
1934	4	5.3
1935	2	2.6
1936	0	0
1937	0	0
1938	0	0
1939	0	0
Total	16	2.1

This statistical study definitely illustrates the value of early diagnosis and the administration of Antitoxin on the part of our physicians.

It is interesting to observe that no deaths occurred in ages above ten years. We feel that, in all probability, persons above this age have acquired either natural or artificial immunity sufficient to lighten the severity of the disease.

TABLE VIII

Age Distribution of Diphtheria Deaths  
1931-39

Age Group	Year									
	31	32	33	34	35	36	37	38	39	
0-5	4	1	3	4	2	0	0	0	0	
5-9	1		1							
10-14										
15-19										
20-24										
25-29										
30-34										
35-										
Total	5	1	4	4	2	0	0	0	0	

## CONCLUSIONS

It is our opinion that three factors must be present for diphtheria to occur, namely, a susceptible person, a source of infection, and a favorable portal of entry for the infectious agent. Our observations would indicate that the links of this triangle can be broken and thus diminish the possibility of the perpetuation of this disease.

Children under six years of age are the most susceptible individuals. The administration of two doses of Alum Precipitated Toxoid will, according to our studies, protect over 90 per cent of the children in this age group, thereby definitely decreasing the likelihood of their contracting diphtheria. Since we now know that the majority of non-immunized children under six years of age are susceptible, and since it requires so much time to administer and read the result of the Schick test, after inoculation, we feel that, for all practical purposes in mass inoculations, the Schick test can be discontinued. As inoculated children pass beyond the sixth year of age, they carry with them their artificial immunity and acquire natural immunity sufficient to ward off most clinical manifestations of this disease. We have been able to confirm this by observing a definite drop in the local morbidity rate as the immunity status increases, and we have not experienced an epidemic since 1935.

The possibility of the source of infection being from actual cases must be greatly lowered as the immunity status increases, whether it be natural, artificial, or both.

As the morbidity rate increases, the mortality rate must decrease, as long as the local facilities remain the same, and the public understands the disease sufficiently to seek early medical advice.

I want to take this opportunity to extend the appreciation of the members of the Board of Health and its Health Department to the members of the Fayette County Medical Society for their co-operation in the prevention and control of this disease and making possible such studies as this.

## DISCUSSION

**Hugh R. Leavell**, Louisville: I should like to ask Dr. Cawood whether he has any figures on duration of immunity in his cases. We have had a number of cases, not a large number, but several, that have had negative Schick tests following injections of alum precipitated toxoid and one or two years later have developed diphtheria. I should like to know whether he has any

studies on duration of immunity.

**A. T. McCormack**, Louisville: This paper of Dr. Cawood's presents to the practicing physician a very definite challenge and a very definite problem. There is no question, but that the tremendous increase of immunity, since artificial immunity has been introduced, is reducing the sick and death rate in diphtheria so rapidly and so definitely that its value is proven, but to the family physician there must be this important factor kept in mind. The more children immunized, the greater the danger to the non-immunized child, because you have many more healthy carriers. The individual cases that will occur in an immunized population like Lexington are just as dangerous to your child or to your patient as if there were an epidemic, because it is far more apt to be unrecognized when there is not an epidemic. For that reason it is extremely important. What we are trying to do all the time, what Dr. Cawood wants to do, is to get the family physician to do these immunizations because it is his responsibility first, and if he will do them we don't have to do them, but if he doesn't, as your representative we are going to do them, because, of course, our children must be immunized. We want you to do it. If you fall down, that is your individual loss. The State Medical Association is not going to fall down, because we are going to immunize these children one way or another. We would a lot rather you would do it, because it is your responsibility.

In regard to the question of the length and duration of immunity, I had the opportunity of seeing some studies in the McCormick Institute in Chicago recently, and where the Schick tests are reported annually over a period of years the number of cases that lose immunity definitely increases with the years. The immunity mechanism of each individual is something he has himself; some of them don't keep as long as others. Many of you have seen repeated clinical cases of diphtheria in a particularly susceptible individual. It is just as probable that there will be infection following immunization procedures where the immunity is lost because of the defective immunity mechanism, but the only value of this knowledge is that you should accept the responsibility for the health care of the family and you should repeat the Schick test with your private patients at least at five-year intervals, and more frequently if they lose immunity at a more rapid rate. That is the practical end of that problem.

I want to express the pride I know all of us feel in the presentation of this paper by Dr. Cawood and in the presentation of this subject in Lexington. As I look over your faces and know where you come from, you will be a little surprised to know that Lexington has been one of the most political-minded bits of government



in the world; there has been as much politics here, and as many different kinds of politics, as in any other place on the face of the living earth, but in Lexington where that is true, a demonstration by the medical profession of the efficiency of an organized profession and an organized health department has so captured the imagination of all the people, including the politicians, who are among the most intelligent group of our citizens, that in violation of procedure and precedent they abolished offices and combined jurisdictions and made of the Fayette County Health Department and the City of Lexington Health Department one unit, and then after they got through doing that they erected a \$50,000 building, as beautifully equipped as any of your health centers in the City of New York. I hope very much that many of you will accept Dr. Cawood's invitation to go out and see it. It is a wonderful monument to a great profession and a great people, and I know you congratulate Dr. Bradley, the President, and Dr. Cawood, the Health Officer, and the officials, profession and people of Fayette County on having accomplished it.

**C. D. Cawood**, (in closing): In reply to Dr. Leavell's question, we have not made observations of the duration of immunity by the Schick test.

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## JOINT FRACTURES

GUTHRIE YOEHLER GRAVES, M.D., F.R.C.S.E.

Bowling Green

Joint fractures offer the surgeon a definite challenge. They are among the most difficult of all fractures to treat successfully. Not only must one deal with the fragments of bone and injured soft parts, but also with one of the most delicate structures in the body, the joint. Nothing less than anatomical replacement of the fractured bone will be sufficient. To be content with less is to acknowledge failure.

The articular cartilage is very susceptible to injury. Even severe bruising may lead to degenerative changes in the cartilage with a resulting stiff and painful joint. Needless to say, irregular surfaces as the result of fracture or the application of stresses upon it as the result of malalignment of bone will produce the same result. Cartilage not in its accustomed place for a few days or weeks, as anyone that has operated upon an old dislocation will testify, soon loses its smooth shiny sheen and is replaced by a rough fibrous surface. Also joints that are immobilized too long become stiff from the loss of

tones of the neighboring muscles and adhesions around the joint. The first may be partially remedied by active contraction of the muscles even when the limb is immobilized and by the exercise of neighboring joints. The second can be minimized by: (1) limiting the initial traumatic edema as much as possible by protecting the injured part with rest (immobilization); (2) avoiding recurrent edema as the result of continued trauma from imperfect immobilization or repeated manipulation and passive stretching; (3) by posture preventing gravitational edema; (4) avoiding the use of irritating foreign bodies near the joint; (5) preventing infections.

It is usually easy to determine that the joint has been injured. To determine the fracture is not always easy. Rough manipulations to obtain crepitus are not necessary and only succeed in causing further insult to the joint. Since most of the joints are superficial, joint tenderness (persistent local tenderness) is easy to establish. This is the cardinal diagnostic point. Other things noted such as joint swelling, loss of function, deformity and inability to use limb, point to the probability of fracture. Any of these signs should cause the surgeon to insist upon an X-ray of the injured joint.

It will protect him from malpractice suits and at the same time enable him to treat the patient more intelligently by establishing: (1) an accurate diagnosis; (2) eliciting details in position of the fragments; (3) revealing certain fractures without displacement or chip fractures around the joints that cannot be determined by examination alone. Good X-rays taken in at least two planes at right angles to one another are necessary. Frequently, oblique angles are necessary to reveal certain fractures of the carpal scaphoid, marginal chip fractures of the back of the lower end of the radius, and of the external malleolus.

X-ray pictures should be taken at the end of reduction of the fracture to be certain that the result is satisfactory. Also they should be repeated throughout the period of immobilization to check the progress of the fracture, to catch any re-displacement early enough to correct it, and as a check upon the presence of avascular necrosis during the second month. The avascular bone will have a hard, dense shadow as compared with the lighter, decalcifying bone which has an adequate blood supply. It spells trouble, because it means a much slower union and no matter how perfect a reduction, some



traumatic arthritis.

If the radiograph does not reveal a fracture strongly suspected, pictures two weeks later may reveal a crack as a result of the movements of the incompletely immobilized fragments causing a traumatic decalcification of the bone in the region of the fracture. This is particularly true in slight crush injuries of the spine and carpal scaphoid. X-rays should be made with the joints in different positions. This may reveal a dislocation which has been reduced. Occasionally a fracture dislocation of the spine may be seen when a conventional lateral picture of the spine is replaced by a lateral of the flexed spine. X-ray pictures of the joints of children may be very puzzling as sometimes the various centers of ossification are difficult to differentiate from fractures. If in doubt, make a picture of the same joint on the uninjured side.

Examination should be made to determine the presence of nerve or blood vessel injury, also for associated soft part injury. Occasionally, fractures around the joint owe their seriousness to the damage of the associated soft parts. For instance, a fractured patella is of very little importance if the quadriceps apparatus is intact. Adequate taking care of this soft tissue injury will usually take care of the fractured patella.

After a thorough examination and adequate record of the injury, the next question is to undo or repair the damage as perfectly as possible. Good anesthesia is essential. Local anesthesia is the method of choice because: (1) it gives good muscle relaxation; (2) it lasts long enough for several manipulations, if the first attempt at reduction is not successful; (3) the patient can cooperate; (4) it can be used in poor risk or old patients that would not tolerate a long general anesthetic. Evipal is useful and pleasant for fractures that require a short time for reduction. General anesthesia, ether, gas, etc., is best for children, for nervous individuals, and necessary for operative reduction.

The reduction of joint fractures reveals problems and peculiarities not present in the treatment of bone shaft fractures. The reduction must be anatomically perfect, less than this is apt to leave a stiff or painful joint. One or more of the fragments is apt to be small. It is hard to grasp this fragment firmly and manipulate this into the required position. In some instances it may be necessary to bring the shaft into the line of the small fragment if this fragment is rotated and cannot itself be manipulated. In fractures of the shaft, traction

and counter traction may be all that are necessary to reduce fracture. This is only occasionally true in joint fractures. Traction and counter traction are only useful in opening up the joint so that the small fragment or fragments can be manipulated or molded back into position. Continuous traction finds little use in joint fractures except in certain comminuted fractures of the joints, such as dicondylar fractures of the humerus and femur and certain fractures of the os calcis in which good position can not be maintained by other means. Small fragments in comminutions of the shaft are not necessarily undesirable for the many bone surfaces mean more callus and better healing, even if avascular they only act as a bone graft. In the region of the joint, these loose fragments are serious, they may block the joint, produce exuberant callus, and thus block complete movement, or the overlying cartilage deprived of its blood supply may undergo degenerative changes. Fortunately, these fragments are not so apt to be displaced markedly by the pull of strong muscles. They are usually anchored by their capsular and ligamentary attachments, and their displacement is usually the result of the direction and extent of the force as applied to them somewhat modified by their attachments of ligaments, capsule, and muscle. Joint fractures are frequently complicated by dislocation.

The first rule is to treat the dislocation by reduction, then if the fracture fragments are not accurately replaced when the dislocation is reduced, these fracture fragments are treated as a simple fracture and are reduced. So the reduction of most joint fractures may be summarized. Under adequate anesthesia as soon as possible after the injury reduce the dislocation and manipulate or mold the small fragments back in position as accurately as possible, if necessary, using traction above and below joint.

Needless to say, these maneuvers will not be successful in many cases. Then the surgeon will have to consider operative interference. In no other type of fracture, will operative interference be so often used to improve upon the closed method. Before embarking upon this course, the operator must consider many things; his own ability, the surroundings that he must work in, the age and condition of the patient, the severity of the injury, and the likelihood of success following the operation.

The surgeon must be a man with good technique, an aseptic conscience, some un-

derstanding and experience in working with bone. He must have an anatomical knowledge of the best approaches to the fracture and joint, he must handle tissue delicately and understand the necessity of conserving the blood supply by gentle and meager dissection of the fragments. His operating room and assistants should be above reproach for no where is the penalty for slips in technique with resulting infection greater. Generally speaking, the young can handle the more severe joint injuries better than the old. The immobilization may be longer and a less perfect result will be better compensated in younger individuals. Also the period of immobilization necessary to secure a good healing of the fracture in the older individuals may be so long that even if anatomical position was perfect, a stiff joint would result. In older people, an immediate arthroplasty might be preferable and the result better than a long period of immobilization in a severely comminuted joint. In certain instances, as in astragalus or patella, excision might be preferable to treating a severe comminution. Certain fractures give much better results when treated by operation such as intracapsular fractures of the hips, bumper fractures of the knees, avulsion of the external epicondyle of humerus, fractures of the olecranon and patella.

Badly comminuted fractures involving the joint may involve the decision of sacrificing mobility for a stable, painless ankylosis of the joint. It is important to remember, especially in joint fractures of the lower extremities, that a painless stiff joint in good position may be preferable to a painful partially movable joint as far as the patient is concerned. This is especially true of anyone who has to do hard manual labor. In my opinion, many comminuted fractures of the os calcis extending into the subastragalar joint are much better treated by arthrodesis at the time of injury rather than to try for mobility of the joint. In the case of comminuted fractures involving the joints of the upper arm, the question of excising the pieces and trying to produce a satisfactory arthroplasty at the time of first examination or later must be considered. This is especially true in older people. If this course is not adopted, fixing the joint in the position of maximum function and trying to get a stiff stable painless joint is indicated. Whatever course is pursued in these comminuted fractures, it must be made very clear to the patient both by talking and writing into the records that his possibility of getting a good joint is

poor. Consultation should be advised, this may save the doctor a damage suit later.

After the joint fracture is satisfactorily reduced, some period of immobilization must be adopted which will firmly immobilize the joint for a period long enough to secure adequate healing of the fracture. This immobilization must be continuous and complete until union is sound. As to the time a fracture should be immobilized, there is only one answer—until the fracture is completely healed. As Watson Jones so aptly expressed, "A fracture is like a man climbing a steep sandhill, until he actually reaches the top he cannot stand still. If he is not gaining ground, he is losing ground." So it is with the fracture. Until the process of union is complete, the immobilization should be absolute. If a fracture is not inclined toward union, there is tendency towards non-union, and until the repair is firm, every single movement sets back the process. The second law in the treatment of joint fracture is this: That every joint that does not need to be immobilized must be actively exercised from the first day of the injury. Immobilization of the joint alone is not the cause of stiffness. Immobilization of the joint plus functional inactivity is the basic cause of stiffness.

In my opinion, the first law of adequate and continuous immobilization can best be accomplished in many instances by the use of non-padded plaster casts or splints. I am fully aware that this may be a dangerous procedure and that other methods of immobilization that are as satisfactory may be used. Non-padded casts should never be used when there is great swelling or the nature of the injury is such that great swelling can be anticipated, nor should it be used by one who is not willing to remove the cast instantly and who does not have the patient under complete control. It is a hospital procedure. Its dangers are: (1) gangrene; (2) fibrosis of the muscle; (3) pressure sores; (4) purulent dermatitis; (5) edema distal to the plaster. All these things can be avoided with reasonable care.

The second dictum of functional activity of the joints not immobilized is absolutely necessary and does as much to prevent stiffness as anything else. Not only does it preserve the tone of the muscle, but it actually prevents stiffness of the immobilized joints by increasing the blood flow from the limb and preventing the venous stasis and water logging of the tissue which is so apt to occur if the limb is not used. It must be remembered that the basis of all adhesions is this exudation of lymph



in the tissue surrounding the joints. Anything that encourages its quick removal as active motion or prevents its formation as adequate rest of injured tissue until it has a chance to heal will cut down upon the stiffness of the joints.

The keynote in preserving joint function of the upper limb is the assiduous practice of joint exercises of the fingers and movement of the shoulder joint except when directly involved from the very beginning. By this, I do not mean that occasionally the patient comes to the Doctor and he works the joints himself. I mean that the patient should spend at least five (5) minutes out of each hour when awake, from the day of the fracture throughout the period of invalidism in exercise of the joints.

It is an advantage in fractures of the lower extremity to start the patient to walking in a non-padded plaster cast as soon as possible. In this way, many of the troublesome adhesions which cause joint stiffness can be prevented, and when the cast is removed instead of finding a badly atrophied stiff limb, we find a limb with very little loss of muscular substance and with relatively flexible joints.

It is essential in injuries of the knee to practice exercises which will strengthen the quadriceps muscle for a knee with a wasted quadriceps is a very weak knee, and a knee with a strong quadriceps is a very strong knee.

The surgeon's treatment and the patient's cooperation after the cast is removed will have much to do with the end result. Assuming that the reduction has been perfect and immobilization is complete until the part is soundly healed and that the various exercises of the non-immobilized joints have been carried out satisfactorily, there still may be a problem of residual stiffness of the joint. The average doctor orders massage, heat, and active movement of the joint and frequently practices passive motion and stretching of the stiffened joint. Of these only one, active motion, is of great value; two, heat and massage, of slight value, and two, passive motion and stretching actually harmful. The best way that I know to assure a patient of a stiff elbow, finger, or hand is the forcible manipulation and stretching of these painful and stiffened joints.

After the cast has been removed, the patient must strive by vigorous active movements of the stiffened joint to gradually increase his range of motion. This will be a slow process unless he has been assiduous in his exercises of the non-im-

mobilized joints, but it should be one that shows a steady progress. If the joint becomes tender or stiff, a few days' rest or a reduction of the exercises is indicated, because these are signs that the fracture has not healed solidly enough to stand the strain. But the patient should endeavor if he can to show some definite increase in range of motion. Frequently, this is so small as to be imperceptible to the naked eye but readily measured by the goniometer. Gentle massage and heat may extend this progress, but their value is overrated. Passive stretching and manipulation until the adhesions have lost their avascularity and become firm will only defeat the process. It has no place in stiffened joints as long as definite progress is being shown by the active movements of the patient. After active motion has ceased to extend the range of movement of the joint and progress has come to a standstill as measured over a period of weeks by a goniometer, the manipulations may be considered. It is well to remember that manipulation is not very successful in a joint with a great number of firm and strong adhesions. It is most successful in the joint with a few adhesions. It must be carried out with gentleness and the amount of force to be used requires great judgment, for it is possible to refracture the bone or to produce more adhesions by the rough manipulations.

In conclusion, joint fractures are difficult to treat, because not only must the fracture heal, but a painless joint with good motion must be secured. Early diagnosis by means of persistent localized tenderness over the fracture plus the use of X-ray is necessary. Joint fractures must be anatomically reduced at the earliest possible moment. Many of these fractures will require operative reduction for success. Good anesthesia, adequate traction and counter traction plus manipulation are the keynotes to success. The fracture must be adequately immobilized until union is sound and complete. The value of the use of hourly exercise of the neighboring non-immobilized joints cannot be overstressed. After the fracture has healed, active motion is the secret of immobilizing the joint. Passive motion and stretching of the joint is to be condemned.

#### DISCUSSION

W. Barnett Owen, Louisville: This is a very timely and a very excellent paper.

The restoration of function without pain is the goal for which we must strive in the treatment of any fracture. More particularly is that true in a fracture of a joint. More perfect



anatomical reposition of the broken fragments is necessary in an interarticular fracture than any place else in the body. Frequently, as the Doctor has stated, we could have a bit of overriding of the shaft of the femur or the shaft of a bone, but maintaining leg length and general alignment will produce fairly good function. That is not true in an interarticular fracture. It is necessary to have more perfect anatomical reposition, because if we do not we will have loss of function, we will have the occurrence of pain.

In treating an interarticular fracture, it is well to bear in mind that in case infection should take place (and sometimes this is unavoidable, or it does occur with any of us if we treat enough of them) it is very much better to have that joint in a position in which function can be acquired to the greatest degree, although the joint may be stiff; for instance, in a fracture of the shoulder it would be necessary to place the shoulder, the upper arm, in abduction to about 40 degrees. In an elbow it would be necessary to place the elbow at right angle. In a wrist, for instance, it would be necessary to have the hand or the wrist in slight cocked-up position. In the knee, 10 degrees flexion. In the ankle, of course, at right angle to the leg and parallel to the opposing foot. That is an illustration of the positions after the broken fragments have been properly or as nearly as possible replaced.

There are crushing fractures in which it is necessary many times, particularly in fractures of the patella where there is an extensive crushing fracture, to note these things. First, you will have a very large patella if you attempt to assemble all the broken fragments and purse-string the entire group. It is very much better to remove a greater portion of that patella, or all of it, if necessary, rather than to have that situation existing.

The next problem in a fracture of the patella which is sometimes overlooked is the fact that the fracture enters the joint and there is a great deal of blood accumulated in the knee-joint, and we know blood is absorbed very slowly in the knee-joint. I have removed a clot of blood from a knee-joint eighteen months after a fracture. It has the appearance of a piece of liver. It becomes organized and makes no attempt to be absorbed. The synovial fluid seems to have rendered it more or less in suspension. It is then necessary, in joint fractures, to operate with the use of a tourniquet, if possible, and to irrigate all of the blood clots. I think it is more sensible, as a rule, to do such open operations as are necessary on joints about a week or ten days later rather than immediately, because the bleeding has stopped, the blood has coagulated, and it is very much safer and you are very much less liable to have infection.

Dr. Graves has mentioned a point that I think is most valuable and the abuse of which we see so many times, and that is the forcible stretching against pain of a joint in which you have adhesions form. If we will bear in mind one thing it will be well: Heat, massage, passive and active motion, up to, but not including the point of pain. Respect the pain. If we force that beyond pain we are not doing the patient good, but we are doing very much harm.

**R. A. Griswold**, Louisville: I have enjoyed Dr. Graves' paper. If we would all follow exactly what he has said in this paper, we would have much less trouble with malpractice suits.

One particular thing with which I was struck was his simile of a man climbing a hill of sand, either going ahead or going back. That is certainly true of fractures right from the start. A fracture is very much like a cancer; you have one good chance at it and if you don't make good on that first chance the rest is a botched-up job that you have to turn over to Dr. Owen to repair.

I would like to stress the point of not stretching these joints by forced passive motion. You do a great deal more harm than good, and you can break a femur by trying that. I know that, because I have done it.

**W. M. Ewing**, Louisville: Dr. Graves has stayed on very safe ground because he didn't have time to go into the individual joint fractures and the various procedures of anatomical replacement. It is my feeling that in joint fractures we should adopt a definite system of classification and approach the various fractures according to the best way we can handle them in the category in which they fall. We all know that in treating fractures we consider the individual case. However joint fractures can be classified. To illustrate this, the example of the hip joint is well known, and it is not necessary to enlarge upon the difference in healing in intracapsular fractures as against those in the intertrochanteric region. The more complicated joints, such as the knee and the elbow, can be classified just as well. For example, in the elbow joint we can divide the fractures into the supracondylar type that we see in children, the condylar fractures, the intercondylar or T-type fracture, the fractures of the olecranon, the fractures of the head of the radius, and finally the traffic elbow or so-called "bag of bones" type of fracture where many fragments are present in the joint. Each one or any combination of those fractures may be treated by a certain method, and if we realize just exactly what we are going to try to accomplish before we go into it, then it is possible to expect a better result.

I think a more radical approach to joint fractures is necessary than in fractures of the long bones. We should attempt anatomical replace-

ment, probably more frequently, not only by open operation, but by internal fixation of some method, such as screws or nails, in order to restore early motion to the joint and avoid that very painful stage of rehabilitation. One of the most painful post-traumatic conditions we see is the osteoporosis or bone softening that results. Early action and restoration of joint function before this occurs will lead to better end results. You will have a patient who realizes that he is getting somewhere as he goes along, because he can see he is making progress, and for that reason you have his fuller cooperation and can expect a better and more happy ending.

### DANGERS OF CHOLELITHIASIS

IRVIN ABELL, M. D.

Louisville

For years pathologists have from time to time reported series of varying size, in which gall stones had been discovered postmortem, and presumably in many instances there had been but little if any active evidence of their presence during life. Much of this is readily understood, when we recall that the symptoms of gall stone disease described by the early writers were largely those of the advanced, neglected and complicated cases.

Pathologists of the present generation, according to Walters and Schnell, put the incidence of gall stones in the adult population at from 5 to 20 per cent, and it is believed that at least 50 per cent of all clinically significant cholecystic disease is associated with calculi. "Kehr expressed the belief that about 10 per cent of adults have stones and Gross, whose material was based on 9,531 postmortem examinations, found stones in 8.4 per cent. Mosher found that 8 per cent of adults in the fourth decade of life had stones and that the incidence rose to 13 per cent in the fifth and sixth decades. Mentzner reported in relation to 633 postmortem examinations performed at the Mayo Clinic that the gall bladders of 21.7 per cent of adults contained stones. Crump in a series of 1,000 postmortem examinations found stones in the biliary tract in 32.5 per cent, and after the seventh decade of life the incidence was 50 per cent." (Walters and Schnell, *Diseases of the Gallbladder and Bile Ducts*, 1940). Naunyn expressed the opinion that gall stones were present in 10 per cent of the human race, and this opinion has apparently been substantiated

by the postmortem material obtained from large hospitals, old peoples homes, almshouses, etc., some of which have just been quoted, but it seems to me more than probable that the illness or disability which placed these people in the hospitals or disabled them to the extent of becoming a charge on the community could well be of such a nature as to bring about gall stones, or even that the disability itself resulted from gall stone disease. That these percentages are in excess of the truth, if applied to the population at large, does not seem open to doubt, being representative of the average "sick," rather than the average "well." It would seem fair to accept the evidence offered as indicating that from 5 to 8 per cent of women and 2 to 4 per cent men have gall stones after the age of 50. All writers agree on a rising incidence with age and a definite disparity in the sex ratio, stones being found 2 to 5 times more frequently in women than in men. While individuals less than 20 years of age enjoy a comparative freedom from gall stones, such instances are by no means rarities; we have seen gall stones in girls 8, 14, 15 and 16 years of age, and Eusterman has reported 54 cases in patients of both sexes less than 25 years of age. The number of stones that may be found in the gallbladder and in the bile ducts varies within wide limits, single stones weighing more than 100 grams having been reported, and multiple stones numbering more than 10,000 have been noted. The types of stones found in an individual case are not of necessity identical, cholesterol stones frequently being found in company with the commoner type of stones. The time required for the formation of gall stones is not definitely known but the original period of precipitation is probably short. Cameron mentioned a study in which the fact was surgically verified that stones formed within two months, and it is well known that the concretions of calcium bilirubinate may form in the bile passages of experimental animals within three weeks. (Walters and Schnell).

Regarding the presence of gall stones without symptoms it may be said of the unexpected stones found at autopsy that no opportunity exists for checking the patient's history in the light of such findings, but in those instances in which gall stones are accidentally found during the course of operations undertaken for other causes, and the history is retaken in the light of such finding, it will usually be



found that symptoms were present but were not differentiated from the symptoms of the disease for which the original operation was performed. Many of us have been impressed with this fact on finding undiagnosed gall stones in operating on women for pelvic disease. After recovery of the patient a satisfactory history of gall stone disease can almost invariably be elicited.

The fact that gall stones have been so frequently and so unexpectedly found both at autopsy and in the course of abdominal operations has led to the belief in some quarters that gall stones are quite innocent of harm to their possessors.

Dr. William Mayo in an article published as far back as 1911 in *The Journal of the American Medical Association* under the title "Innocent Gall Stones A Myth" began his discussion as follows: "Some years ago we heard a great deal about 'innocent' gall stones, which meant that gall stones existed without symptoms and that their presence was not suspected until postmortem brought them to light. We can not now escape the conviction that the gall stones did cause symptoms and that we as diagnosticians, and not the gall stones, were 'innocent.' In the early history of our knowledge concerning gall stone disease the diagnosis was not often made until secondary complications and infection had brought about marked local signs and symptoms or until nature hung out the 'yellow flag of jaundice.'" While this indictment of our diagnostic ability in part still holds good today, the greater accuracy in the taking of histories and the widespread diagnostic use of the x-ray make possible the recognition of the presence of gall stones in most instances long before their disastrous complications not only herald their presence but as well the gravity of the danger to life induced by them. We desire to review briefly the dangers of cholelithiasis as observed by my associate, Dr. M. J. Henry, my son, Dr. Irvin Abell, Jr., and myself in a series embracing more than 2,000 operations on the biliary tract. In so doing we do not mean to imply that every patient with gall stones will ultimately suffer one of these complications, but we do submit that the outlook for continued good health in the presence of cholelithiasis is doubtful and that the presence of gall stones does constitute a menace to life. When the cystic or common ducts become obstructed by calculi, the advent of infection rapidly produces

pathological changes which seriously threaten the life of the patient. Suppurative cholecystitis and cholangitis; gangrenous cholecystitis; perforation of the gallbladder with resultant spreading peritonitis, or if sealed by the adherence of adjacent viscera, the formation of a pericholecystic abscess; abscesses in the liver, single or multiple, along the gallbladder bed; fistulous communications between the gallbladder and adherent stomach or intestine, hepatitis and pancreatitis are commonly noted in the course of an obstructive cholecystitis. If the common duct is the site of the calculous obstruction, dilatation of the intrahepatic and extrahepatic bile passages occurs accompanied by jaundice. With persistence of obstruction there is suppression of the excretory function of the liver with relation to bilirubin and changes in the parenchyma resulting from cellular atrophy produced by high intraductal pressure, rupture of the finer bile passages, infection and fibrosis. The immediate danger to the patient is tremendously increased and the chances for complete freedom from symptoms after recovery are greatly diminished. Operation under such circumstances is not elective, but imperative and its chief objective is the saving of life rather than a complete toilet of the biliary tract, an indication which must frequently be postponed until such time as the condition of the patient makes it reasonably safe.

The cases of empyema and of hydrops of the gallbladder encountered by us have in 99 per cent of the cases been due to calculous obstruction of the cystic duct. External biliary fistulae of spontaneous formation with the discharge of gallstones have been noted in the right hypochondrium, at the tip of the right eleventh rib and in the right lower quadrant. It is true that these were, for the most part, observed years ago, but it is worthy of note that during the present year a subcutaneous abscess over the right costo-chondral margin was opened under local anesthesia followed two weeks later by the extrusion of a gall stone from it. The internal fistulae have been more frequently noted, averaging about 1 in each 150 operations: the fistulous communications existed most frequently between the gallbladder and the duodenum, less frequently between the gallbladder and stomach, and still less frequently between the gallbladder and colon. Eight cases of acute intestinal obstruction were observed due



to obturation of the small intestine by large calculi. These had escaped from the gallbladder by ulcerating through an adherent coil of duodenum or jejunum, and in each instance had produced acute obstruction by obturation low down in the ileum. While it is possible for stones to pass through the cystic and common ducts into the duodenum, those of sufficient size to produce intestinal obstruction invariably escape from the gallbladder through a fistulous communication between it and the intestine.

Gall stones were present in 22 of 35 cases of acute pancreatitis coming under our care, bearing out the accepted hypothesis that disease of the biliary tract is the frequently recognized causative factor in the inflammatory disease of the pancreas. We have on a number of occasions noted at operation old areas of fat necrosis, indicating that these patients had at sometime suffered an acute pancreatitis from which they had recovered. In our experience chronic pancreatitis, evidenced by local induration and edema, has been a relatively frequent finding in gall stone disease. It partakes of the interlobular or inflammatory form and does not present the glycosuria and hyperglycemia so frequently noted in the interacinar variety. I am unable to give the percentage in our series, but other clinics have reported incidences of from 5 to 25 per cent. In a series of 66 cases of carcinoma of the pancreas from our records reviewed by Dr. Irvin Abell, Jr., gall stones were present in 19. In analyzing the symptoms and findings in 27 consecutive cases of carcinoma of the gallbladder, he found stones to have been present in all. These findings parallel those of other surgeons, it being generally accepted that the stones are primary to the carcinoma and that the origin of the latter is in some degree traceable to the chronic irritation produced by them.

With this somewhat cursory review of the dangers of cholelithiasis which we have had opportunity to observe personally, and bearing in mind the fact that many of the patients gave no previous history of symptoms of sufficient degree to warrant their seeking medical advice, indicating that the stones had been present for varying periods of time, one must surely regard the term "quiescent" as a relative one and the term "innocent" a fallacious one, insofar as they relate to gall stones. Regardless of an apparently benign course, it can not be denied that

the possessors of gall stones may at an unpredictable time suffer serious danger as a result of the advent of obstruction, jaundice and infection. There is abundant clinical and statistical evidence to warrant the conclusion that patients who have gall stones face a reduced life expectancy and that their chances of survival are enhanced by cholecystectomy. In a series of 500 consecutive cholecystectomies done by us during the past decade for acute, subacute, gangrenous and chronic cholecystitis the mortality was 2 per cent. Simple operation for uncomplicated gall stones should have a mortality of less than 1 per cent. That temporary palliation may be procured with non-operative measures is not denied, but since the cure of the patient can be brought about only by surgical measures and since early operation is relatively safe, we feel that unless age, obesity, hypertension, cardio-renal or other disease contra-indicate the employment of surgery, the removal of stone-bearing gallbladders gives the patient the most chance for health and life.

#### DISCUSSION

**R. Alexander Bate:** It gives me great pleasure to hear Doctor Abell in his gracious way discuss subjects essentially controversial.

His courtesy, like General Lee's makes fretful topics unirritating.

The beautiful way in which Doctor Abell modified Doctor Mayo's remarks concerning the "innocent gall-stones," tempts me to giving the unexpurgated incident.

Doctor Mayo said, "He knew of nothing as innocent as the innocent gall-stone that caused so much distress; unless it were the innocent practitioner who failed to recognize the innocent gall-stone as the cause."

Some one, I will not say who, replied that "he knew of nothing as innocent as the innocent practitioner, who failed to recognize the presence of the innocent gall-stone; unless it were the innocent surgeon, who cut down upon the empty gall bladder and found no stone."

If I may, I will begin at the gall-stone and deduce the conclusions, which I hope may be evident.

First of all, gall-stone is a word much used to conjure with, where the impression may be "rock."

The profession of Kentucky has recently had demonstrated to them in an unequivocal way hyperparathyroidism of tumor origin.

In which the excess of parathyroid hormones in the system had activated the enzyme, phosphatase (located in the osteoblasts, the periosteum and the cells of the small intestine) which dissolves the calcium, and thus causes

hyper-calcemia.

Porosities of the bones, spontaneous fractures, etc., were demonstrated; also nephrolithiasis. Cholelithiasis is usually present too.

Free calcium in the circulating fluids causes precipitation of cholesterol from the bile by forming insoluble compounds of bilirubin calcium and phosphate combinations from chemical union with the bile acids and lecithin which hold cholesterol in solution.

Surgical removal of the tumor in the case reported, removed the cause of the hyperparathyroidism. Metabolism was restored.

The bones reform and the calculi disappear under these circumstances.

Time prevents further elaboration.

I would like however, to call attention to the prophylactic measures, especially in pregnancy, where one out of every four, shows gall-stones.

Organic acids under these circumstances originate in the system from the disturbed metabolism of hepatic parathyroid dysfunction.

**J. Garland Sherrill:** Dr. Abell is, I feel sure, able to defend his position in this matter. He has expressed clearly and cogently his views taken from wide experience in his own work. Surgical opinion has gone through several changes, since Dr. Mayo's first report of a large series of cases. He startled the fellows by the fact that none of the other surgeons of that date came near his record.

Incidentally the question: "Where is Rochester?" When asked "How is it that you get so many cases of gall-stones?" Dr. Mayo replied; "We look for them." His remarks carried great. Nobody believes that primarily causes the disease, but is the effect of cholecystitis resulting from infection brought to the liver and its ducts, the gallbladder and ducts through bacteria carried in the blood.

In treatment the object is to free these structures from the infection and each surgeon obtains the result by the methods he has found most satisfactory to him.

Dr. Abell has well pointed out that not only should the patient be relieved of the gall-stone but of the infection as well. To prevent reformation of the stones, every method, even the use of diet and the glandular secretions of Dr. Bate, whose studies have been very wide in this line, should be used.

**L. Wallace Frank:** It just so happens that I am preparing a paper on Gall Bladder Disease. I came especially tonight to hear what Dr. Abell had to say and I trust that he will send me a copy of his paper so that I may have the benefit of his ideas.

I have reviewed so far, 336 cases of Gall Bladder Disease, of this number 250 had stones. I

agree completely with what Dr. Abell says regarding "silent stones." These are the stones that are found at autopsy and naturally one cannot go back and question the patient. However, in the living patient when gall-stones are found incident to operation for other disease, further questioning of the patient will elicit symptoms referable to the gall bladder.

As to carcinoma of the gall bladders, in fifteen cases of carcinoma of the gall bladder so far reviewed, stones were present in the gall bladder in every case. I do not mean to say that the stones in the gall bladder caused the cancer. However, when one considers the fact that stones were present in the gall bladder of thirty cases of cancer of the gall bladder which Dr. Abell has mentioned and the same was true of the series I just mentioned one must come to the conclusion that there may be some causal relationship between the presence of stones and the development of cancer.

The most striking point that Dr. Abell made is the importance of operating while the stones are still in the gall bladder. The mortality of cholecystectomy while the stones are in the gall bladder is one thing, the mortality when the stones are in the common duct is another thing. The hope of saving life lies in the removal of the stones or gall bladder while the stones are still in the gall bladder, not after complications have developed.

**Irvin Abell,** (in closing): I wish to thank those who have discussed the paper and, in closing, to mention and reaffirm some of the statements which Dr. Bate has made.

For many years it was quite widely thought in the profession that gallstones were solely the result of infection in the gallbladder. It has become more widely recognized that there is a definite percentage in which the etiological factors are chemical. I did not go into the causation of stones for the reason that such would, by itself, form the subject of a paper. Until research work can find out definitely the chemical changes in the body that have to do with the formation of gallstones we will still have to continue treating complications. It is solely on this basis that the paper was presented.

The "Magic Mountain" personality of the tuberculous, described by Thomas Mann is symbolic of their uncertainty, mental unrest and feeling of social insecurity. It is due to the failure of the public to understand the tuberculous. Fear that the patient experiences about the attitude of others makes him depressed and nervous, gloomy and unfriendly and ashamed of his illness. The cured tuberculosis patient should have a fair chance to return to normal life. Morton A. Seidenfeld, Science News Letter, December 9, 1939.



HISTORY OF CHEMOTHERAPY IN  
URINARY INFECTIONS

J. ANDREW BOWEN, M. D.

Louisville

In considering any subject we are faced first with the need of a good definition. The dictionary tells us that chemotherapy is the treatment of disease by means of chemical substances. To Ehrlich<sub>1</sub> who coined the word it meant "the action and mechanism of the effects of chemical substances upon cells and especially of drugs upon disease producing organisms." The term has been loosely used by various authors but has been most clearly defined by Dr. Claus Schilling<sub>1</sub> of the Robert Koch Institute in terms of its objectives as follows: "chemotherapy has for its aim the destruction of parasites in the body of the host, or at least so to injure them that they will prove vulnerable to the hosts' own defensive powers." In this sense then chemotherapy would post-date the discovery of the microbic origin of disease. The treatment of disease by use of chemical substances had its origin with the alchemists who without a definite knowledge of chemistry attributed their few successes to a combination of religion and witchcraft. In 1568 Paracelsus published a treatise on chemical therapy in which he exhorted physicians to substitute chemical therapy for alchemy and witchcraft.

But to Robert Koch<sub>2</sub> must be attributed the first experiment in chemotherapy. After observing the effects of bichloride of mercury in high dilutions upon the spores of anthrax cultured *in vitro* he carried the experiment through by injecting guinea pigs repeatedly for three days with sublimate solution and subsequently inoculating them with anthrax. In spite of the fact that his animals all died of anthrax in the usual time Koch still continued in his belief that it was possible by means of antiseptics to alter the course of anthrax infection in the bodies of experimentally infected animals. Although these experiments failed their great value lay in the fact that they brought up the question of why a substance which was so active against an infecting organism *in vitro* should have so little effect *in vivo*. Here then for the first time was recognized one of the most vital facts in chemotherapy—the behavior of a substance in

*vitro* has no relation to its behavior *in vivo*.

At about this time Paul Ehrlich<sub>3</sub>, became prominent in the field of chemistry, bacteriology and medicine. Early in his career, in fact while still a medical student, while studying the disease of lead poisoning he had observed that the metal showed a consistent and definite affinity for certain tissue cells of the body. This observation remained with him and later lead to his theory of chemical affinities which is now the working basis for chemotherapy.

Following the experiments of Koch and furthered by the theory and observations of Ehrlich, the antiseptics were thoroughly studied for their effects upon organisms *in vitro*. Although many facts *in vitro* experiments were discovered, notably that the various forms of organisms showed marked differences in their susceptibility none of these could be carried over *in vivo* experiments. Thus the situation stood until the early twentieth century when shortly following the discovery of the parasites of African sleeping sickness by Dutton and Ford in 1901, Laveran and Mesnal<sub>4</sub>, reported that they could temporarily clear the blood of mice infected with the trypanosome of Nagana by the use of sodium arsinate (Fowler's solution). This is probably the first successful experiment in chemotherapy and is of the utmost importance because it caused Ehrlich to undertake systematically the study of chemical substances in blood borne diseases. Using trypan-red he was able to sterilize the blood of infected mice as late as twenty-four hours before death when the trypanosoma equinum was the infecting agent. Unfortunately, as we so well know now, this agent was not effective against other types of organisms or in other animals. These experiments mark the first attempt against infection by a synthetic dye compound. From this stimulus much work was done and many significant reports made, among which two facts stand out—trypan-red had little or no effect on trypanosoma outside the animal body, and parasites could become resistant or drug-fast to chemotherapeutic agents. With the discovery in 1905 of the spirochete of syphilis and with his experience in the use of chemical compounds against trypanosomic diseases, Ehrlich began his experiments on the use of arsenic compounds in the treatment of syphilis, in 1909 producing arsphenamine which has since, with some variations, been the outstanding chemotherapeutic agent. Little



more of importance was discovered in this field for two decades until the discovery of mandelic acid in the treatment of urinary infections gave an impetus which has continued to the present time.

Prior to about 1930 urinary infections were treated with alteration in the reaction of the urine, by the use of methanamine, mechanical drainage and irrigation with antiseptics. Passing attempts at treatment with such dyes as methylene blue, phenosulphophthalein and mercurochrome had little to support them from the standpoint of antiseptic value, or were too dangerous to the patient when given in adequate dosage or by the proper route. However these attempts were not wasted for they brought about the clinical use of phenosulphophthalein which is undoubtedly the best all around functional test substance known at present; and mercurochrome must be considered still a good antiseptic in vitro. Although alteration in the hydrogen ion concentration of the urine was used widely for a long period in the treatment of urinary infections, Mitchell and Scott<sub>5</sub> demonstrated that the acidifiers have neither a bactericidal nor a bacteriostatic action, and Helmholz<sub>6</sub> has shown that such alterations have no therapeutic value. In an acid urine methanamine is still considered a good antiseptic by many but since it depends upon the liberation of formaldehyde for its action, it leads to swelling of the urinary tract mucosa and hematuria when used in amounts large enough to be of therapeutic value.

Ketogenic diet was first used by A. L. Clark<sub>7</sub> in 1931 in the treatment of recurrent pyelocystitis due to the colon bacillus. It soon became apparent that an increase in acidity of the urine was necessary to obtain the best results and that the chemical substance responsible for the bacteriostatic action in this diet was beta-oxybutyric acid (Fuller<sub>8</sub>). Later on Helmholz and Osterberg<sub>9</sub> demonstrated that a concentration of 0.5 per cent of this acid was necessary in a hydrogen ion concentration of less than 5.5 to inhibit the growth of *Escherichia coli*, *aerobacter aerogenes*, *proteus vulgaris*, *staphylococcus* and *streptococcus faecalis*. Although a great advance, this treatment is complicated because of the difficulties in obtaining the proper supervision in making the diets and because of the inability of many patients to take them over sufficiently long periods.

Rosenheim<sub>10</sub> found that mandelic acid not only could replace beta-oxybutyric acid

but was superior in action and was not so completely metabolized in the body. Helmholz<sub>11</sub> showed that mandelic acid and beta-oxybutyric acid act in the same manner, and in the same concentration, effecting the same type of organisms, i. e. the gram negative bacilli, staphylococci and streptococci, faecalis. The difficulty in this treatment lies in the fact that anything such as low renal function, which will not permit a sufficient degree of acidity, vitiates it. Since its discovery various salts of mandelic acid have been tried and the one now most commonly in use is the ammonium salt.

In 1908 a German chemist Gelmo<sub>12</sub> compounded a substance known as para amino benzene sulfonamide. This substance later became the foundation for the sulphur containing compounds now used so extensively for chemotherapeutic agents. Long and Bliss<sub>13</sub> give a complete history of the early development of this and related substances in the first chapter of their book. The year after Gelmo's work azo dyes were prepared with sulfonamine by Horlein, Dressel and Kothe for use in the textile industry in Germany. These azo sulfonamine dyes "were distinguished by greater fastness for washing and milling than those of sulfonamine free products" which qualities were thought to be due to the affinity of the dye for the protein cells of the woolen fabric. However not until 1913 is there any evidence that these dyes were recognized to be bactericidal in vitro (Eisenberg) and the following year Tchichibabin and Zeide synthesized Pyridium, which was not introduced as a urinary tract antiseptic until Ostromyslensky used it twelve years later.

For about ten years this dye was used extensively but without spectacular results. Gillespie<sub>14</sub> found that upon the recommended dosage of 0.2 grams of pyridium even with restricted water intake the urine could not attain a concentration sufficient to inhibit even *staphylococcus aureus*.

Although the German Patent Office had issued a patent to Drs. Mietzsch and Klarer in 1932 which covered several azo dyes and the original prontosil formula, the first clinical report of prontosil came at the monthly meeting of the Dusseldorf Dermatological Society in May 1933. Dr. Foerster<sub>15</sub> reported upon a case of *staphylococcus septicemia* treated favorably with Streptogen, a substance later to be known as prontosil. This is the first instance of the use of sulphur containing dye substances in the treatment of dis-

ease and contrary to the usually accepted belief it was introduced in a staphylococcal rather than a streptococcal infection. No experimental data appeared until 1935 when Gerhard Domagk reported his work on streptococcal infections in mice, in which he stated that 100 per cent of the treated animals had survived, and also that no bactericidal effect was noted *in vitro*—in other words the substance acted as a true chemotherapeutic agent only in the living animal.

In the next few years many reports, both experimental and clinical, appeared in the German, French and English literature. It was not until 1936 that any report of this work appeared in America when the June 13 issue of the *Journal of the American Medical Association* published an abstract on the use of these compounds. However a few clinicians in this country who had read the reports in foreign journals were trying prontosil compounds in treatment of bacterial diseases. The first clinical use of prontosil in this country seems to have been by Weech on a patient at the Babies Hospital in New York in 1935<sup>16</sup>. Probably the first comprehensive report was given by Long and Bliss in 1936 before the annual meeting of the Southern Medical Association at Baltimore<sup>17</sup>. The literature since that time has been great and varied in the use of prontosil and allied compounds and in every type of infection. From this many facts have been found, but the clinical work is far ahead of the experimental and at present these drugs are used far too promiscuously.

Klee and Romer<sup>18</sup> have the distinction of making the first report of the use of prontosil in urinary infection (*B. coli*). Since then also the literature has been voluminous and a complete resume is neither possible here nor desirable. In short we now use a number of sulphur compounds—prontosil, neoprontosil, sulfanilamide, sulfapyridine, sulfathiazol, and sulfamethylthiazol. Each of these has its particular use and each may succeed in individual cases. In general the first four of these have beneficial effects upon all urinary infections except streptococcus faecalis. The last two on the other hand have decidedly harmful effects on this organism. Before those two were introduced mandelic acid was relied upon to clear the urine of streptococcus faecalis for a change from one type of sulphur compound to another now serves our purpose, being used in almost 100 per cent of uri-

nary infections.

In the treatment of gonorrhea reports have been made with widely differing results. As a general thing we may expect a decided help in probably 90 to 95 per cent of cases and a cure without the use of other types of local or general treatment in probably 20 to 25 per cent. In no case however should the long accepted local treatment of urethritis with mild antiseptics be given up. They can in no way effect a change in the action of the sulphur compounds and they do aid greatly in a quick relief from discharge.

From the widespread use of the sulphur compounds and the many favorable reports it might seem that we have at last reached a state of perfection in the treatment of urinary tract infections. Unfortunately this is far from true. In using these compounds two factors of utmost importance must be taken into consideration—first the tolerance of the patient for the drugs and second the presence of obstruction to the outflow of urine (functional). In considering the first it must be realized that tolerance is variable to a great extent and the greatest care should be exercised. The manifestations of toxicity are many and varied, the most prominent and important being gastric disturbances and blood changes. Clinical experience in the use of these drugs has been so extensive that practically all the reactions have been recorded in the literature many times. In the presence of obstruction to the outflow of urine from an infected kidney the sulphur compounds are less efficacious probably because of reduced function and a consequent lack of concentration of the drug. It may be said however that when tolerated by the patient, and in the absence of obstruction, the great majority of urinary infections can be cured or at least brought under control.

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## DISCUSSION

**D. E. Scott, Lexington:** This is a subject, which I feel, as I feel about several others which have been on our program, could very well bear repetition, something that we could listen to each year. It is one of those things to which our present knowledge is in a state of expansion. Someone yesterday, discussing Dr. Hendon's paper on male hormone therapy, stated that he had brought our knowledge up to date as of Tuesday, September 17, 1940. The implication was, whether intended or not, of course, that on Tuesday, September 17, 1941, we had better bring it up to date again. Certainly the same thing applies to our knowledge of infections of the urinary tract.

The most striking current realization is probably that of the ultimate effect of chronic pyelonephritis in producing hypertension. We are beginning to realize that infections in the urinary tract are not just nuisances; they are very serious and dangerous in their ultimate consequences. That fact should make you all more earnest in your endeavors to completely cure your patients. It is such an easy matter, particularly in the acute infections when symptoms have subsided, to let the thing drift on, hoping that luck or the Lord or nature or some obscure force will finish up the therapy and eliminate the final residual infection from the urinary tract, when, as a matter of fact, you may very well be leaving the seed of an insidious, long-standing infection. In the chronic infections it is very easy for you to lose heart or interest with it before you have completed the cure of your patient.

In that connection, we are faced with the fact that present day urinary antiseptics are not well tolerated over long periods of time. So it is well to know they can be given intermittently with very good effect.

Dr. Bowen said that chemotherapy is just one phase of the subject. Of course, it is the first thing, naturally, to be tried, and you are supposed, when that fails, to call loudly for the urologist to come and help you and tell you why it has failed, which is perfectly right. However, with modern drugs you are very much further ahead than you have been in the past. You will be still further ahead if you will yourself examine urine specimens rather than send them off to someone else's laboratory for a report; you will have more fun, you will get a quicker report, and you will be further ahead scientifically; you will get a visual impression which will be of much greater value to you than a type written report. It is a simple matter, to learn how to do a Gram stain, and a most useful thing in connection with modern drug therapy. Certain drugs undoubtedly are going to fit certain types of bacteria better than

others. It will not only tell you about the presence or absence of the gonococcus with which you commonly associate a Gram stain, but the worst one that you can do will at least tell you whether you are dealing with a coccus or a bacillus, and will give you a very definite lead as to whether you are going to expect good results from mandelic acid therapy, or whether some one of the sulfonimides would be better tried.

**J. Andrew Bowen, (in closing):** There are many things, of course, in the work of the early men, particularly Ehrlich, which have been forgotten. I am sure that when he promulgated his theory of chemical affinities, he was far, far ahead, of where we now stand. As it has worked out, I think it not beyond possibility at some time—I hope shortly—that we will have a chemical substance which can be taken and tolerated by the human system which will be absolutely specific for each given organism. That may be slightly fantastic now, but in the last ten years we have taken very long strides in this direction, as you all know from your personal experiences in the use of the sulphur compounds. It has been definitely shown by many workers that certain types of organisms are resistant to some of them, and yet are very susceptible to others. The chemical formulae of these substances are extremely similar, but, as we know, very slight differences, sometimes only in the position of the chemical components of a compound, make tremendous differences in the reactions in the body and their effects upon organisms.

I had hoped that Dr. Scott would talk to you fully about the sulphur compounds in gonorrhea, but evidently he felt that was less important than what he did say.

**Oil of Wintergreen Poisoning.**—Since oil of wintergreen is extremely poisonous and constitutes a particular hazard in the home with children (because of its pleasant odor), Kaag recommends that all oil of wintergreen dispensed be labeled "poison" and the purchaser warned of its danger. When poisoning occurs, treatment consists of immediate and thorough lavage. Small amounts of solutions of sodium bicarbonate or magnesium sulfate may be left in the stomach. If collapse occurs, supportive measures are instituted. If the heart weakens, judicious amounts of epinephrine result in at least temporary improvement. Convulsions may be controlled with chloral hydrate if necessary. After early treatment, prognosis should be guarded and the full gravity of the situation realized. The urine should be watched for the appearance of albumin or acetone and sugar. Intravenous fluids may be given. Two cases of oil of wintergreen poisoning are reported; one of these terminated in death.



## DIFFERENTIAL DIAGNOSIS OF BREAST TUMOR

JAS. A. RYAN, M. D.

Covington

In no other ailment of the human body is an early and a correct differential diagnosis more essential than in Tumor of the Breast.

In early lesions of the breast, it is sometimes difficult, and often impossible, to make such a distinction, without the aid of the pathologist. It is obvious, that only upon the early recognition and the proper treatment of breast tumors does the future health and life of the patient depend.

While not every breast tumor contains cancer cells, such a large proportion do, that we must work on the assumption that every tumor, in its inception, may be the first step toward cancer of the breast. A safe assumption is, that every tumor of the human breast is guilty until proven innocent.

Due to the wide publicity given to tumors of the breast by the various Cancer Control Agencies in this country, through Women's Clubs, Parent-Teacher Associations, etc., more women are becoming tumor conscious and are presenting themselves earlier and earlier to their physicians for examination. This is a good thing for the women, but it makes the physicians' and surgeons' problems of differential diagnosis most difficult; for, as has been often stated, early breast tumors have so many common characteristics, that too many times it is impossible to differentiate a benign from a malignant lesion by physical examination.

At their inception, and in their early stages, the various forms and combinations of adenomata, fibromata, cystic degenerations, etc., usually cannot be differentiated physically from cancer and the diagnosis must be made by excision and biopsy. This is also true of that conglomerate group of lesions known as chronic mastitis. Some surgeons are willing to depend on the frozen section for diagnosis. Others believe that such examinations are not thorough or reliable enough and insist on permanent sections made from every portion of the excised mass. It is not uncommon in every pathologist's experience to read a dozen or more slides as negative and then on continued examination to find unmistakable evidence of malignancy.

Dr. Bloodgood used to insist that two or more pathologists pass on every specimen slide of excised tumor of the breast.

Many women present themselves to their physician with the complaint of pain in the breast. If questioned, they will admit that both breasts are painful. This condition usually occurs before or at the menstrual cycle. Anxiety and fear of cancer greatly exaggerate their symptoms. No lump being found, the physician usually can allay their fears and their symptoms will abate. However, the vast majority of women who present themselves for examination, do have definite abnormal lesions or tumors in their breasts, and need treatment. This treatment is directly dependent upon the diagnosis.

Abscess of the breast occurs nearly always in the lactating breast, usually in the very early stages. An unclean and irritated and infected nipple is the usual cause. These abscesses develop rapidly with all the symptoms of acute inflammation, with suppuration, and may be single or multiple.

The common varieties of benign tumors are the various types of adenomata, cysts and the different manifestations of chronic mastitis. Adenomata usually occur in younger women. They are frequently found in breasts that have never lactated. These tumors are usually well defined, are smooth, are freely movable and are not attached to the skin. Sometimes when these tumors are situated at or near the areola, a shortening of one or more of the lacteal ducts will occur and will cause an apparent dimple in the overlying skin. With delicate manipulation, the skin will be found to move over the tumor. The illumination or shadow test may help.

Chronic mastitis or chronic cystic mastitis, if generalized as it sometimes is, should be easily recognized. Examination of both breasts will be helpful. Often times these multiple lesions will be found in both breasts. These nodules feel smooth and rounded under the finger and are not attached to the skin, and do not move with the skin. They appear discreet, their edges not being palpable. A single area of chronic mastitis will often be taken for cancer, and must be excised and examined microscopically to prove its innocence. Chronic mastitis may be the result of some hormone unbalance. Dr. Dean Lewis has done some interesting work in developing this idea.

Tubercular Mastitis is usually secondary

to Pulmonary Tuberculosis and presents a soft and fluctuant mass. Some authorities claim that in some instances it is primary in origin. This is doubtful, for it does not seem logical that the point of entry should be through the nipple and lacteal ducts. In the later stages, discharging sinuses may be found. Luetic Mastitis should be mentioned. It is probably very rare, and accompanies other evidence of syphilis in the body.

Traumatic fat increase is a condition in which there is usually a history of injury. The mass usually is adherent to the skin and moves with the skin. It is situated in the subcutaneous fat, and may be also adherent to the underlying breast tissue. It is frequently mistaken for cancer and only by excision and biopsy can it be differentiated.

Paget's Disease starts superficially and involves the areola and the nipple. There is usually a yellowish viscid excretion. In Paget's description of the disease, he observes that no treatment affects this local condition, and that in every case he had seen, a cancer developed at, or near the original site, in from one to two years.

Schimmelbusch's Disease is a collection of multiple small cysts involving large areas of one or both breasts, and it is also probably due to some involutionary changes in the breast, probably of hormonal origin. Mastitis in the male breast manifests itself as a small, hard, rounded nodule, underlying the nipple and in men of the cancer age, the breast should be excised.

Papillomata are epithelial growths that occur within the lacteal ducts, and are probably benign in origin, but may undergo cancerous changes. They are usually small, but when they are superficial, that is just under the areola, they can be palpated. In this type, bleeding from the nipple may be observed.

Malignant tumors of the breast are classified as Sarcomata and Carcinomata.

There are two types of sarcoma of the breast. The one arises primarily as a sarcoma and involves the breast tissue. The other develops secondarily at the site of an old adenomatous tumor. Some observers may question this statement. They believe that a simple tumor remains benign to the end and never undergoes any malignant change. Malignant tumors of the male breast are usually sarcomatous in origin. Sarcomata comprises probably less than one per cent of all breast tumors.

Cancer of the breast is comparatively common and is variously estimated to include from fifty to seventy per cent of all breast lesions. MacCarty reports that it was found 3,461 times in 7,763 lesions of the breast. The two common classifications of carcinoma of the breast are Scirrhus and Medullary. In Scirrhus Carcinoma, the cancer cells are found in small groups, embedded in a very dense fibrous stroma. Medullary Carcinoma presents large groups or islands of cancer cells, with a very scanty fibrous stroma. This type is found most commonly in younger women.

Scirrhus is also applied, but not in the same sense, to the very hard, long existing tumor found in the breast of elderly women. They have a very low degree of malignancy.

The adeno carcinomata produce new tissue growth and are invasive and metastasize late. They may occur at any age, but are found most frequently in women from forty to sixty. It is not uncommon in the thirties.

It is with the early diagnosis of the malignant tumors of the human breast that we are so vitally concerned. The well developed tumor of the breast, with adhesions to the skin, with the so-called "pig skin" or "orange peel" appearance, with retraction of the nipple, with bleeding from the nipple and with palpable axillary glands, or with even the later manifestation of ulceration, is never hard to diagnose. It will be recognized at a glance. Unfortunately, surgeons see all too many cases with these late manifestations. However, after a comprehensive search for any evidence of metastasis, he must bow to convention, and with some mental reservations, and sometimes unwillingly, he still has to resort to the so-called Radical Operation with pre-operative and post-operative massive radiation.

Acute Inflammatory Carcinoma is a comparatively rare growth. It involves the entire breast. The breast is uniformly enlarged and the skin is reddened, thickened and indurated over the whole breast surface. The skin presents an erysipeloid appearance. These cases metastasize early and are usually not operable.

A trained sense of feel is probably the most valuable clinical aid in the early diagnosis of cancer of the breast. Extreme gentleness must be used in the palpation and manipulation of breast lesions.

Both breasts should be exposed in the



standing position for inspection. There may be noted an asymmetry between the two breasts, or a deformity, due to skin retraction of one breast, may be noted. Palpation of a breast tumor is best done in the reclining position. The mass must be palpated against the chest wall and not picked up between the fingers. In cancer, the skin seems to move with the tumor and frequently minute dimples may be seen in the skin overlying the mass. In early cases the mass does not seem to be attached to the underlying muscle. This minute "pig skinning" or "orange peeling" appearance is due to the very early involvement and shortening of Coopers ligaments, which are minute facial attachments between the skin and the breast fascia.

The shadow test, with the patient on the back in a darkened room is sometimes helpful. By directing a small flashlight obliquely against the skin involved, and by moving the underlying mass, minute shadows may be shown; whereas, the skin overlying the normal breast tissue will be rounded and high lighted. Transillumination in a dark room may be of some value in determining whether a tumor is cystic or solid.

Roentgenology is beginning to play a part in the diagnosis of Breast Tumors and a new field is being developed called Mamography, in which, by the injection of some radio opaque substance into the lacteal ducts, and by subsequent radiograms, deviations from the normal outlines of the ducts may be noted. Dr. Frederick U. Hicken, in the June 1937 issue of the Nebraska State Journal, presents some very interesting case reports on Mamography.

In the final analysis, despite all of the clinical means we use to differentiate breast tumors, the pathologist is the final arbiter. That he must be competent and reliable goes without saying.

Thus, briefly have been listed some of the more common forms of breast tumors. There are other classifications and subclassifications that have not been mentioned.

It is probably true that cancer is just about as much on the increase in the human breast as in any other part of the body; but, if as the result of the crusade of the various Cancer Control agencies, women are being examined and treated for early and for pre-cancerous lesions, then despite any increase in the incidence of cancer, there must follow some appreciable decrease in cancer mortality.

## DIAGNOSIS

**Louis Frank, Louisville:** I arose from a sick bed to attend this meeting because I desired, in the first place, to return the courtesy of Dr. Ryan, who so graciously invited me to open this discussion, and, in the second place, because of the reason that our distinguished Secretary, Dr. McCormack, has just told you that this is the fiftieth annual session of this society which I have attended, my salutatory address having been delivered in the old Opera House on Broadway in this city, under the presidency of Dr. Hawkins Brown of Houstonville, and I hope that this is not my valedictory. (Applause)

To return to the paper, I was delighted to hear it and think it a most excellent one and one that can well bear reading and rereading. A discussion of tumors of the breast narrows down and really means a discussion of the differential diagnosis of benign tumors of the breast from cancer of the breast and I think this is the essence or at least should be of such discussion. There are over 10,000 women who die needlessly each year of cancer of the breast either because of delay in diagnosis or of delay in the discovery of the growth.

It is not always easy to differentiate between benign and malignant growths and in this connection I will show two slides, one of a benign growth and the other a cancer that the most expert would be unable to differentiate without the history. One is a plasma cell tumor, the other a true carcinoma yet both show "pig skinning" with retraction of the nipple, fixation of the skin and more or less fixation of the breast together with some slightly enlarged glands in the axilla. The plasma cell tumor is a benign growth, a form of mastitis, and as said before, difficult certainly for the inexperienced to diagnose.

It is the early symptoms in this type of tumor that are often overlooked but which give us the key to the diagnosis. These symptoms consist usually of some slight discomfort with redness of the skin, the latter soon disappearing and the skin and breast then taking on gradually the appearance of carcinoma far advanced. We removed the breast, the slide made from which was shown you, before our diagnosis was made. It taught us a lesson and we have not made the same mistake since.

This brings up the question of what should be done in the doubtful cases. Just a few days ago we had a case very similar to the one previously discussed in which there was "pig skinning" of the breast. The tumor felt very much like a carcinoma and I think anyone or certainly anyone who sees but few of such cases a year certainly would have made a diagnosis of carcinoma of the breast. We were doubtful about it



and instead of doing a radical operation we simply removed the breast and submitted the entire organ for microscopic examination. In doubtful cases we believe that it is often advisable to remove the entire breast and subject it to immediate pathological study. I think it will occasionally happen that a breast with a benign tumor has been removed but this will not be very frequently.

I feel that we as physicians should be much more cancer minded than we are. As it is at the present I believe the public are probably more cancer minded than the profession. I wish also to say without being critical or reflecting upon any man's diagnostic ability, and I think you will readily understand what I mean, that the man who sees one or two cases of cancer of the breast in a year is hardly in a position to give as expert or even as highly valuable opinion as the man who sees twenty-five or more such cases each year and is in constant contact with the disease. Therefore I believe that if there is the slightest doubt upon the part of the general practitioner as to the nature of the growth in the breast that he should and may without any reflection upon himself, suggest that his patient see someone who has had a large experience in the diagnosis of these cancers and I am sure that if this is done we probably will be able to reduce the mortality of cancer of the breast quite considerably. It must be remembered that there is a great difference between early diagnosis of cancer and a diagnosis early in cancer.

This latter point is well illustrated by the slide which I show you and this slide was used in the cancer campaign in this State. It is one of the group of slides sent out by the American Society for the Control of Cancer. You will see very little difference in the diagnostic points suggested in our examination from those that were promulgated by the younger Gross in his book published in 1880. He practically insisted upon the same diagnostic criteria. These criteria are however not present in the early cases but represent cases in which the growths have existed for sometime. It is true that a discussion of a diagnosis early may be more or less academic but at the same time we should and must endeavor to make a diagnosis before the presence of skin involvement or of fixation to the pectoral muscles or involvement of the lymph glands has occurred. This means that the breast must not be overlooked in our every-day physical examinations.

One of the most important contributions to the study of carcinoma of the breast with particular reference to metastasis is a recent article by Batson of the University of Pennsylvania which appeared in the July issue of the *Annals of Surgery*. He described a new set or group

of veins which he calls the vertebral venous system, the existence of which explains many of the paradoxical metastases which occur in cancer and which we also see in certain groups of infections. Metastasis of breast cancer to the brain and cranial bones is not infrequent and likewise do we often see brain abscess secondary to infection in the lungs and also brain cancer secondary to bronchogenic carcinoma. The spread in each instance is through this venous system. I think Batson's contribution is probably one of the most important so far as the spread of cancer is concerned that has been made in recent years.

As I have said previously in my discussion I believe that we certainly should look upon all tumors of the breast as malignant until we prove them benign. If we can prove them benign good and well, and if not, the breast had better be removed and the entire organ examined. I think as I previously said that it is better to sacrifice a breast innocent though it may be than to let the disease progress until metastasis and glandular involvement has occurred because we know when this happens there are very few patients notwithstanding the most radical procedure who will survive for a long period of time.

Metastasis may occur very, very early and with the understanding of the vertebral venous system which Batson has so beautifully described one can readily comprehend why. It is advisable therefore before doing a radical operation upon these patients to do a thorough x-ray study particularly of the spine, bones of the skull and also of the long bones of the upper and lower extremities. We think this is very essential as it not infrequently shows metastases which were unsuspected.

Cancer of the breast is still a problem. Today regardless of the emphasis placed upon early diagnosis and notwithstanding the extreme radical operation which we do the results of treatment are not much better than those of Halsted and his co-workers of years ago.

I want to thank you, Mr. President, for your indulgence, for I know I have gone far over the allotted five minutes, and to again thank Dr. Ryan for the opportunity of discussing his comprehensive and excellent paper.

**J. Garland Sherrill**, Louisville: There is a time in every cancer, as stated in an article on that subject, when that cancer can be cured. Unfortunately, we do not know when that is. We have been taught for years that we should get induration, pig skin and glandular involvement and attachment to the muscles. That is late, too late, in the main. The thing to do when you have a suspicious growth in the breast that is sufficiently suspicious to make you worry about it and make the woman worry about it is to take

the breast off rather than to take the risk of a cancer. Growths that are growing out are less harmful than growths that are growing in.

Many men recommend cutting a piece of tissue out of the gland in the breast and have it examined by the microscope. It is all right, but do we expect a microscopist or a pathologist to tell by a little bit of tissue which may miss the cancer entirely, what is the matter? Dr. Frank has stated the breast should come off and be subjected to exact examination all over the breast before you can say that woman hasn't a cancer. If I were seriously considering a tumor of the breast that was suspicious I would not wait. I do not believe we should ever sacrifice a woman's life simply to retain a breast. Therefore, I recommend to you that you take out these suspicious breasts, that you apply the examination to the pathological tissue and then made a radical extirpation of what is in the axilla afterwards if necessary. I know if you will do that you will reduce the mortality and the incidence of breast cancer one hundred per cent.

**James A. Ryan**, (in closing): I have nothing to add to my paper other than to thank Dr. Frank very sincerely for his courtesy and for his graciousness in discussing this paper, and also to congratulate him on his fiftieth anniversary at these state meetings. I also want to thank Dr. Sherrill for his kindly discussion.

The invention of the ophthalmoscope is generally ascribed to Helmholtz of Koenigsberg because of his publication in 1851 of a report describing his "eye-mirror." However, it appears that this valuable instrument was really invented in 1847 by Charles Babbage the English mathematician. Instead of reporting his invention, Babbage showed it to Thomas Wharton Jones, the outstanding ophthalmologist of that time, and Jones, apparently was not favorably impressed with the instrument. Nevertheless, nearly four years after the appearance of Helmholtz's report, Jones wrote in the *British and Foreign Medico-Chirurgical Review* (14: 426, 1854): "Dr. Helmholtz, of Koenigsberg, has the merit of specially inventing the ophthalmoscope. It is but justice that I should here state, however, that seven years ago Mr. Babbage showed me the model of an instrument which he had contrived for the purpose of looking into the interior of the eye. It consisted of a bit of plain (sic) mirror, with the silvering scraped off at two or three small s-Os in the middle, fixed within a tube at such an angle that the rays of light, falling on it through an opening, in the side of the tube, were reflected into the eye to be observed, and to which the one end of the tube was directed. The observer looked through the clear spots of the mirror from the other end."

## RECENT DEVELOPMENTS IN THE TREATMENT AND PREVENTION OF PELLAGRA

JOHN KOOSER, M. D.\*

Hyden

The recent impetus to the study of pellagra has been the discovery of the deficient factor, nicotinic acid. The first recorded account of this disease is credited to Gaspar Casal in his observations on Mal De La Rosa in 1735. The word pellagra (meaning rough skin) was first used by Frappoli in 1771. In the United States the disease was reported as early as 1864 in the north. In 1907 Searcy first called attention to the large number of cases in the asylums in the south. The severity of the condition increased, but there was very little progress in the treatment because there were so many diverse opinions on the cause and the cure.

The first order out of this chaos was instituted by Dr. Goldberger (1) and his co-workers, who established the fact that pellagra was due to a dietary deficiency and was not due to an infection. This group of workers produced and cured pellagra in humans in their memorable Rankin Farm experiment in Mississippi. In 1937, Dr. Spies and Blankenhorn (2) were successful in showing a food relationship in alcoholic pellagrins that was similar to the work of Dr. Goldberger. In addition they cured severe cases because they were able to supplement diet with food extracts and food concentrates.

The clue to this elusive something in foods that was causing pellagra was furnished by Dr. Elvehjem (3) and his co-workers. They found that canine black tongue could be cured by the addition of nicotinic acid. This was the first creditable role of nicotinic acid since its discovery in 1863. In addition these workers were able to accomplish the same results by the use of nicotinic acid amide which they obtained from yeast and liver. Dr. Spies and Dr. Blankenhorn (4) were among the first to be informed of this discovery and immediately used this substance in human pellagra with remarkable success. Intensive work is now in progress in this country, particularly in the south. To date nicotinic acid has been accepted officially as the deficient factor in pellagra

Presented at the Annual School of City and County Health Officers, Louisville, July 30, 1940.

\*Medical Director of the Frontier Nursing Service, Hyden. From the Department of Preventive Medicine, University of Cincinnati.



and is recommended for the treatment of the active pellagrin. However, a number of important problems remain to be solved. Among these are the biochemistry of nicotinic acid, the nicotinic acid content of foods, and the problem of prevention.

It has been my good fortune to be a part of the pellagra study that is in progress in the southeastern part of this state. With the assistance of the health departments of Perry, Leslie and Clay Counties and the collaboration of Dr. Blankenhorn of the department of Internal Medicine of the University of Cincinnati, we have studied therapeutic and preventive aspects of this disease for the past two and a half years. Thus far we have observed 110 patients in various phases of pellagra.

**DEFINITION AND ETIOLOGY:** Pellagra is a deficiency disease due to the lack of nicotinic acid. The patient gets pellagra because the diet is inadequate, because he is unable to metabolize an adequate diet, or because the requirements of the body have increased. The inadequate diet group comprise those individuals who cannot afford the proper foods, or who do not utilize a given diet to the best advantage. Other individuals may have an adequate diet available for consumption but it is not eaten due to the idiosyncrasies of the individual, or the body may not be able to assimilate the protective substances in sufficient quantity. In the third group the needs of the body may have increased as in organic disease, infections, malignancies, or pregnancy. In the group under discussion the people got pellagra for the most part because they could not afford an adequate diet.

**EPIDEMIOLOGY:** The distribution of pellagra in this country is difficult to define due to the absence of morbidity rates and due to the limited value of mortality rates. In main it is a disease of the south but by no means confined entirely to that area. In this state it is confined to the larger cities and to the southern part of the state. In the last 14 years which have been reported by the Bureau of Vital Statistics there have been from 58-124 deaths per year. The peak of these deaths were in the age groups 50-70 years. The distribution according to sex (1937-1938) was male 68, female 72. The county distribution of these deaths is available for the years 1937-38. It is of interest to note that there was one pellagra death reported from Clay County

in these two years. The morbidity rate may be judged by the fact that from 1938 to date there are 90 cases on the register from that county. Undoubtedly the figure is even higher for we do not keep a register of sub-clinical cases. The so-called pellagra season is usually the late spring-summer months, but the disease is by no means limited to any particular season.

**DIAGNOSIS:** Pellagra has a characteristic set of signs and symptoms, from which one can usually make the diagnosis with ease. There is a prodromal period of from weeks to months, during which time there has been gradual loss of weight and strength, apathy, listlessness, anorexia, nausea or vomiting, constipation or diarrhoea. In addition the patient complains about a hot burning or stinging mouth or tongue and progressive nervousness. There may be early psychic changes with the patient incoherent, disoriented, and with faulty sensory perception. At this point diagnosis is difficult without adequate laboratory facilities. With the appearance of the characteristic changes in the skin, mouth and tongue, the condition is obvious. The symmetry, location, consistency and course of the skin lesions are constant. The sequence of the changes in the tongue are characteristic but they are not always present or they may have receded by the time the physician is consulted. It is well to point out that there are other causes for a red tongue and for an atrophic tongue. The patient is usually undernourished, ill at ease, or apathetic. These findings vary with the severity of the disease, with the number of attacks, and with the season of the year. The history is of great importance to the diagnosis. Frequently the dietary history obtained is not compatible with the findings. These fallacies can be checked by ascertaining the supply of food and its source, the income, and the number of individuals dependent on these. If the patient is a child he may be, as far as foods go, the problem child of the family. If the patient is the mother of the home she may get little of the food because she gives most of it to the children and to the husband. Where the food supply is limited the individuals tend to minimize the fact that they have little to eat. There is also a generous number of complaints which may be due to diseases other than pellagra. The associated deficiency diseases should be kept in mind as well as the fact that

these complaints may be due to pellagra in its pre-clinical form.

**TREATMENT:** The treatment of the active pellagra patient is usually quite satisfactory. When nicotinic acid is given in adequate doses the response is very gratifying. The healing of the mucous membrane lesions is instituted within 48 hours. This is true of the mouth and tongue as well as the gastro-enteric tract. The healing of the dermal lesions is less rapid, but this process is definitely accelerated. There is a return of appetite, an improvement in the well-being of the patient, a more stable mental outlook, and the patient begins to gain in weight.

The amount of nicotinic acid required varies with the severity of the manifestations. In the very mild cases, 50-100 mgms. per day is adequate. In severe cases up to 1000 mgms. per day may be required. It is most effective when the total daily dose is given in small doses at frequent intervals, in order that absorption be at an even rate. In an ambulatory clinic (5) such as ours, the dose is divided into three equal portions to be taken at the end of each meal. This procedure delays the rate of absorption and tends to minimize the uncomfortable sensations that some patients encounter while taking the medication. To our severe cases who are still able to attend the clinic, we give 600 mgms. daily for one week. With satisfactory improvement, this amount is decreased gradually until the manifestations have disappeared. In an uncomplicated case three to four weeks is adequate. The patient is then requested to return to the clinic at bi-monthly or monthly intervals in order that he may be rechecked. Unfortunately, a number of the patients with pellagra have other illnesses which impede the progress of the treatment. Of this group one of the most troublesome is the patient with diarrhoea. This condition occasionally is a causative factor in pellagra and will not respond to nicotinic acid because it is not due to pellagra. In our clinic it is frequently impossible to ascertain what it is due to but whatever its type, hospital studies have proved that it is a factor in the cause of pellagra. Patients with tuberculosis, cancer, pregnancy require more prolonged treatment.

**EFFICACY OF THE TREATMENT:** The efficacy of the treatment depends on the restoration of the nicotinic content of the body to its desired protective level. What this level is remains to be determined. In our clinic our criteria are relief from com-

plaints, absence of signs of pellagra, the return to work, and gain in weight. Of these the most important are the changes in weight. A disease treated successfully must restore the patient to his former life; but if the treatment leaves the patient with poor health from other causes, the result is incomplete. The return to work is hard to assess. Since most of our patients are mothers the return of the mother to work is very indefinite. However, weight is something that can be measured.

In the original group of patients—forty-one—that we reported, the results were given in terms of weight changes, as compared with the state of nutrition of the patient at the beginning of the treatment. It has been possible for me to report the progress of 31 of these patients since they have been rechecked at varying intervals, 6-26 months after the initial treatment. These results are given in the following table:

#### PATIENTS WHO HAVE BEEN RECHECKED

Nutrition (Beginning of treatment)	Recurrences		No Recurrences	
	Weight		Weight	
	Gain	Loss	Gain	Loss
Good	1	1	2	0
Fair	3	3	5	3
Poor	3	3	7	1
Total	7	7	14	3

(Gain 5 lbs. or more in weight: Loss, failure to gain 5 lbs. or an actual loss in weight).

In the group without recurrences the patients have either regained their lost weight, or they have received nicotinic acid at frequent intervals. This group represents those patients who have attended the clinic at regular intervals. In the group of patients with recurrences most of the individuals are still under weight. They have neglected to attend the clinic regularly. In order to cure a given patient, the weight gained must be proportionate to the weight lost, and this total gain must be maintained. This change cannot be brought about by nicotinic acid alone, without the addition of more or better food. Recurrences can be anticipated in patients who have failed to gain, or who have not gained enough weight. In this group it is possible to prevent recurrences by the frequent administration of small amounts of nicotinic acid. We have prevented recurrences in this manner, and have observed recurrences when this substance has been withheld intentionally.

**PREVENTION:** In the prevention of pel-



pellagra several factors stand out thus far: associated deficiency diseases, recurrent pellagra and the problem of the pellagra community. The associated deficiency diseases include other ills due to lack of Vitamin B. Best known of these is beri beri, or polyneuritis. We have had a few patients with this disorder, while in larger clinics it complicates 20 per cent of the pellagra patients. The syndrome of riboflavin deficiency (7) is in its infancy but pellagra patients do get cheilosis, certain ocular signs, magenta tongue, and do respond to the administration of riboflavin. There are reports which indicate a third deficiency, that of B<sub>6</sub>, pyridoxin, in clinically cured pellagrins, without B<sub>2</sub> or B<sub>1</sub> deficiencies. In patients who have been successfully treated for pellagra, beri-beri, and ariboflavinosis there are sometimes additional symptoms such as extreme nervousness, weakness, difficulty in walking, insomnia, and irritability which have responded to the administration of pure vitamin B<sub>6</sub>. In the study of pellagra most of these deficiencies have been discovered as parts of pellagra itself.

The recurrent pellagrin constitutes one of the most troublesome problems. Thus far 21 of our patients have had recurrences while four of this group have had two recurrences. These recurrences appear to be due to the fact that after treatment they return to their pellagra-producing diet. Since it is impractical to keep patients on nicotinic acid indefinitely, the pellagra producing diet, fat pork, cornbread and beans, is a direct reflection on the poor economy in the home and in the community. This fact was substantiated by two nutritional surveys (9) which we conducted. For this food study we selected one inactive coal camp which had supplied us with more patients (15 per cent) than any of the other coal camps. For comparison we conducted the same survey in the area covered by the Frontier Nursing Service, where pellagra is rare. Both areas are in the same hill section of this state. The families are of the same race with similar speech and habits. The Frontier Nursing Service families are poor soil farmers. The coal camp families are miners but they were originally farmers. We were interested in foods, but since we could not weigh and measure what they ate and because of the tendency to minimize the scarcity of their diet, we could not rely on foods alone. The families were asked to indicate the frequency with which they ate available and desirable

food, but this was supplemented by facts about their income, its amount and source; land; stock; gardens; crop; and purchasing habits.

In the coal camp, the 93 families (average size, 5.3 individuals) subsisted almost entirely on cash income with a median income of \$35.50. Their diet was pellagra-producing. The 330 rural families (average six of family 6.3) 24 per cent of the families carried by the Frontier Nursing Service) had a cash income which ranged from \$20-40 per month, but in addition most of the families had several pigs, a cow, and a few chickens. They ate foods which prevented pellagra.

The chief food differences between the groups was found in the consumption of fresh milk and eggs. In the coal camp 53 per cent of the families ate these foods three days or less per week. In the rural area only 10 per cent of the families had these foods as infrequently as three days per week.

The solution to the coal camp area appears very simple, supply them with more work and more money. However, there are pellagrins in more fortunate coal camps. Miners as a class tend to live to the full extent of their monthly income. It is necessary for them to adjust themselves to the changing tempo of the industry. This includes providing in advance for the lean months, and an improvement in their knowledge of the health-saving and money values of foods.

The rural area provided a further clue to prevention. At the present time pellagra is rare but pellagra was formerly endemic (1913-1927) to that part of the country. I have been assured of this fact by my predecessors who practiced in this same region. This change is difficult to explain. The population has increased, the farms are smaller, there are more tenants, and the soil less productive. The chief crop is corn, with an average planting of six and one-half acres and a yield of 47.5 bushels. This can hardly qualify as a cash crop. They do manage to maintain a cow, several pigs and a few chickens but the products of this stock have been used in the past for their barter or trade value. The one significant change in this area has been the advent of the Frontier Nursing Service. This organization, as you may know, has an active obstetrical, pediatric, public health program. One of their first problems was that of diet, i. e., the undernourished adult, the mal-nourished child, and the improperly fed infant. With the

continued emphasis of the staff on foods, the families are now more discriminating in the value they attach to respective foods. Out of this has come a more desirable state of health. The absence of pellagra is due to the fact that they eat pellagra-preventing foods. It is also a result of an intensive child welfare program which has constantly emphasized foods, as milk, eggs, and meat, and it is a fortunate coincidence that such a recommended diet is just the right one to prevent pellagra.

**SUMMARY:** In summarizing, it is fitting to reaffirm the successful role of nicotinic acid in the treatment of pellagra. It cures the disease but it does not cure the associated deficiencies which frequently co-exist with pellagra. The final prescription should include these preventive factors as well. The well-being of the pellagrins is dependent on his ability to stay on a pellagra-preventive diet. This is the social and economic part of the preventive formula. It is estimated that at least 10

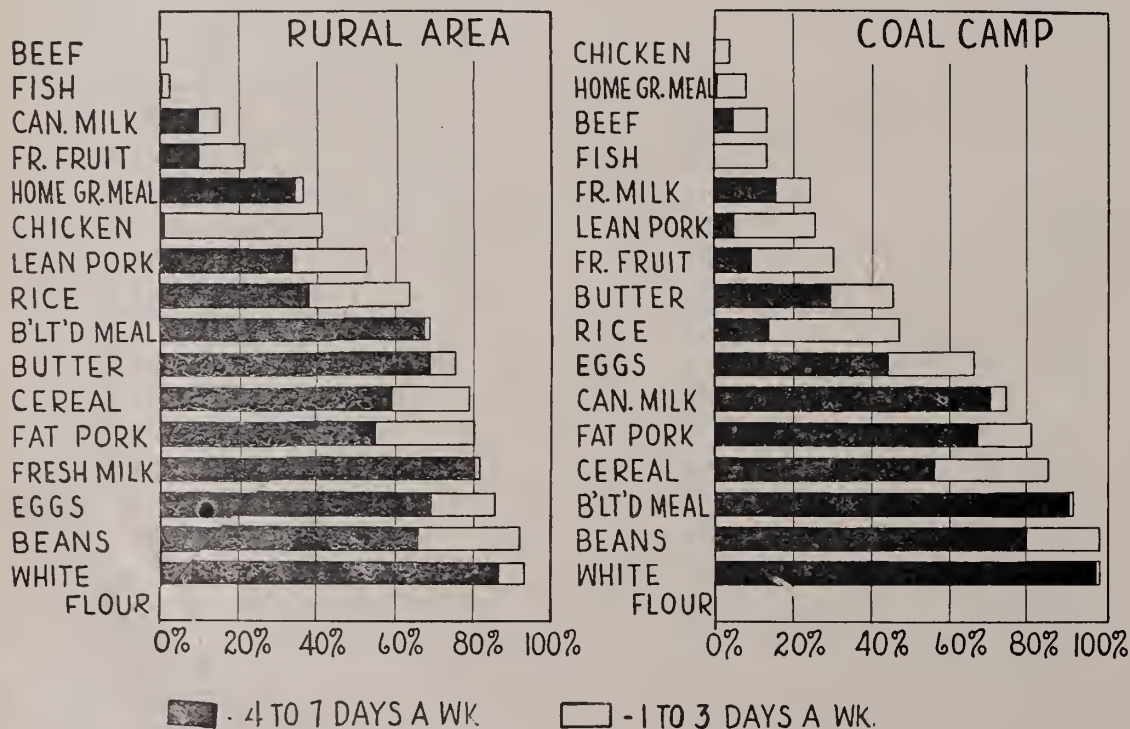
per cent of the inmates of the insane asylums in the south are there due to pellagra. With pellagra a preventable disease, this presents a formidable problem. Since there is a marked similarity in the clientele of the pellagra clinics and of the Public Health Clinics, the Public Health Organization is in a strategic position to assist in solving this ominous problem.

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## COMPARATIVE DIETS.

### PERCENTAGE OF FAMILIES WITH FOOD INDICATED





## BOOK REVIEWS

**HYDROCEPHALUS, ITS SYMPTOMATOLOGY, PATHOLOGY, PATHOGENESIS AND TREATMENT** By Otto Marburg, M. D., New York, Veritas Press, 250 W. 67th Street, New York, Publishers. Price \$3.00. Illustrated.

This volume is a fusion of the older words with the author's own experiences and is intended for all practitioners and especially neurologists, pediatricians and surgeons. The book is dedicated to the child Neurology Research and its director, Dr. Bernard Sachs, who is devoted to the furtherance of science and who rightly feels that care of children represents the basis of social health.

**SYNOPSIS OF MATERIA MEDICA, TOXICOLOGY AND PHARMACOLOGY FOR STUDENTS AND PRACTITIONERS OF MEDICINE.**—By Forrest Ramon Davidson, B. A., M.Sc., M.D., Assistant Professor of Pharmacology in the School of Medicine, University of Arkansas, Little Rock. With 45 illustrations including four in color. The C. V. Mosby Company, Publishers, St. Louis. Price \$5.00.

In this condensed volume pharmacology is presented as an applied subject as it should be taught in the clinic and classroom. The role of drugs in the treatment of disease is illustrated by a large number of prescriptions of merit which are included in the text. Full instructions are given for the correct method of writing prescriptions. It is a splendid reference book for the busy practitioner.

**IT IS YOUR LIFE—KEEP HEALTHY—STAY HEALTHY—LIVE LONG.**—By Max M. Rosenberg, M. D. Member American Medical Association and New York County Medical Society. Formerly in charge of Clinical Laboratory O. D. Department Beth Israel Hospital, Clinical Assistant Internal Medicine, Beth Israel Hospital, Clinical Assistant Pediatrics, Gouverneur Hospital, with 450 pages. The Scholastic Book Press, 158 East 22nd Street, New York, Publisher. Price \$2.50.

Differing from the numerous health and medical advice books which undertake to teach the reader to diagnose and treat every imaginable disease under the sun, from apoplexy to pinworms, this book has an entirely new and modern approach and point of view. Besides these are a few ideas which run as an undercurrent throughout the book. They are: that man is not a mere animal, that the activity of the human mind is more than a mere materialistic phenomenon and that in spite of this seemingly dark hour of civilization, there is hope for the individual and a great future for the human race. Many physicians are learning

about the scope and purpose of this book and several on reading the manuscript, thought that it will be a boon to their patients and to the public at-large by thoroughly familiarizing the readers with the working and care of their bodies thus making people understand more intelligently and appreciate more highly the doctor's advice, when it is sought.

**THE DOCTOR AND THE DIFFICULT CHILD.**—By William Moodie, M. D., F.R.C.P., D.P.M. Medical Director, London Child Guidance Clinic and Training Center. Commonwealth Fund, New York, Publishers. Price \$1.50

Dr. Moodie, an English psychiatrist with long experience in treating children, has for many years been the medical director of the London Child Guidance Clinic. This book, written in simple, unaffected language, free from jargon and theoretical generalizations, offers to the pediatrician, the general practitioner, and the intelligent layman practical suggestions with regard to emotional problems encountered in daily practice.

The book shows the sympathetic insight of its author into the point of view of the parent, both the one who exaggerates and the one who underestimates the importance of his child's behavior. In discussing direct treatment of children, Dr. Moodie shows how an approach to a child's problem may be made through interpretation of his play, his drawings, and his fantasies, and offers helpful suggestions toward winning the confidence of young patients and diagnosing their difficulties. While stressing the satisfaction of the emotional needs of the child—for work, security, and affection—as basic to health and happiness, he does not overlook the importance of physical illness and mental defect as a possible source or contributing factor in disturbance of behavior and personality.

Dr. Moodie's book is a contribution to the practice of child guidance, which is becoming more exact in its knowledge, sure in its methods and successful in the results.

**OBSTETRICS IN GENERAL PRACTICE.**—By J. P. Greenhill, B.S., M.D., F.A.C.S. Professor of Obstetrics and Gynecology, Loyola University Medical School, Chicago; Professor of Gynecology, Cook County Graduate School of Medicine; Attending Gynecologist, Cook County Hospital; Co-Editor of the Year Book of Obstetrics and Gynecology; Author of Office Gynecology. The Year Book Publishers, Inc., Chicago, Illinois. Price \$3.50

Seventy definite therapeutic procedures are presented in full detail; medical, surgical and physiotherapeutic measures for common obstetrical conditions. Seventy-nine specific diagnostic procedures are given, ranging from differ-

ential diagnosis to abortion and placenta praevia to etiologic differentiation of postpartum hemorrhage. Special chapters on obstetric endocrinology, local infiltration, Anesthesia, Abortion and Miscarriage, Roentgenography in Obstetrics, for instance, are replete with invaluable suggestions on problems that are encountered in everyday practice. Because this is a book in practical obstetrics, every page is packed with clear, terse directions on how to handle the complications that arise most often in ante and postpartum care and management of delivery; thirteen signs and symptoms which may be forerunners of trouble in pregnancy; five causes of postpartum hemorrhages, check list of dosage of sulfanilamide for various obstetric conditions; complete list of material to outfit an obstetrical bag; thirteen obstetric conditions in which pituitary extract is of value.

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**APPLIED PHARMACOLOGY**—Hugh Alister McGuigan, Ph. D., M. D., F.A.C.P., Professor of Pharmacology and Therapeutics, University of Illinois, College of Medicine, C. V. Mosby Company, St. Louis, Mo., 1940. \$9.00, 914 pages. A text book and reference book of marked value. The author has divided his work into the Pharmacology of various parts of the human body and the drugs used in the treatment of each subdivision are reviewed.

The chapter on the Chemotherapy of Syphilis consists of 77 pages and it includes descriptions of all the well-known drugs used in the treatment of syphilis. It begins with the lesser used drugs, mercury and iodides and ends with bismuth and the arsenical preparations. Further reference concerning each drug is given at the conclusion of the discussion of the particular drug in question. The description is simple and to the point and practically written. Facts are stated clearly and pharmacological preparations of the particular drug is described at the conclusion of each particular section. All in all, the chapter is quite inclusive in its contents.

The page headings in some cases appear to be misplaced. The table of contents and chapters are not arranged so as to be readily usable but there is a fairly complete index and as a reference book of recent date this publication should be valuable.

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### NEWS ITEMS

The Mississippi Valley Medical Society offers annually a cash prize of \$100.00, a gold medal and a certificate of award for the best unpublished essay on any subject of general medical interest (including medical economics) and practical value to the general practitioner of medicine. Certificates of merit may also be granted to the physicians whose essays are rated second and third best. Contestants must be members

of the American Association who are residents of the United States. The winner will be invited to present his contribution before the next annual meeting of the Mississippi Valley Medical Society at Cedar Rapids, Iowa, October 1, 2, 3, 1941. the society receiving the exclusive right to first publish the essay in its official publication—The Mississippi Valley Medical Journal (incorporating the Radiologic Review). All contributions shall not exceed 500 words, be typewritten in English in manuscript form, submitted in five copies and must be received not later than May 1, 1941. The winning essay of the 1940 contest appears in the January, 1941 issue of the Mississippi Valley Medical Journal (Quincy, Ill.) Further details may be secured from Harold Swanberg, M. D., Secretary, Mississippi Valley Medical Society, 209-224 W. C. U. Building, Quincy, Illinois.

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The Eighteenth Annual Meeting of the American Orthopsychiatric Association, an organization for the study of and treatment of behavior and its disorders, will be held at the Hotel Pennsylvania, New York City, on February 20, 21 and 22, 1941. A registration fee will be charged for non-members. Preliminary program will be sent by writing Helen P. Langer, M. D. Chairman, Publicity Committee, 1790 Broadway, New York City.

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Dr. Carl Lewis Wheeler, 74, retired Lexington physician and former president of the Fayette County Medical Association, died at Good Samaritan Hospital, Lexington, December 15th. A native of Mason County, Dr. Wheeler, was graduated from Central University in Richmond and later from Louisville's College of Medicine. He began practicing medicine about thirty-five years ago in Lexington and at one time was Lexington's health officer.

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Dr. Porter Prather, 81, a Lexington physician for thirty-five years, died November 29th, from a leg fracture, suffered in a fall. He was a native of Owen County and graduate of the Ohio Medical School at Cincinnati; served as Assistant Physician at Eastern State Hospital for four years before entering private practice in Lexington.

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Dr. Green L. Johnson, 56, president of the Mercer County Medical Association, died December 4th at Harrodsburg. He was an active worker in the Society and had served as part-time health officer for the county for many years.

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Clyde E. Purceli, of Paducah addressed the Sixty-sixth annual meeting of the Southern Illinois Medical Association on Bronchoscopy.



# Kentucky Medical Journal

Published Monthly By  
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Incorporated

Entered as second class matter October 22, 1906, at  
the Postoffice at Bowling Green, Ky., under act of  
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NEXT MEETING LOUISVILLE

## COUNTY SOCIETY REPORTS

**Mercer:** The Mercer County Medical Society met in the office of the County Health Department, at 7:30 P. M., December 10.

Those present were: C. B. VanArsdall, presiding in the absence of G. T. Ballard, Vice-President, Gabhart, Lowerey, Meredith, Humphrey, Price.

The minutes of the previous meeting were read and approved.

The following officers were elected: G. E. Lowerey, President; W. S. Gabhart, Vice-President; J. Tom Price, Secretary-Treasurer; G. E. Lowerey, Delegate, C. B. VanArsdall, Alternate; C. B. VanArsdall, Censor. Board of Censors; R. T. Ballard, G. E. Lowerey, C. B. VanArsdall.

A committee composing C. B. VanArsdall, chairman, T. O. Meredith, J. Tom Price, was appointed to draft resolutions on the death of Green L. Johnson, who died December 4, 1940.

Edward C. Humphrey read an excellent paper on The Treatment of Anemia, discussing Pernicious and Iron Deficiency Anemia. A general discussion followed.

G. E. Lowerey paid dues for 1941. The Society adjourned.

J. TOM PRICE, Secretary.

**Four-County:** The quarterly meeting of the Four-County Medical Society, composed of physicians residing in Caldwell, Crittenden, Lyon and Trigg Counties, was held in Cadiz, Trigg County, on Tuesday night, November 26, 1940, and following dinner served in the American Legion Club House, the meeting was called to order by the president, D. J. Travis, of Eddyville, and minutes of the previous meeting were approved after having been read by the secretary, W. L. Cash, Princeton, who read communications and reported as to membership and finances of the Society.

The scientific program consisted of two papers, one by Jack Witherspoon, Nashville, on "Massive Hemorrhage from the Stomach; Treatment by Diet;" and one by O. N. Bryan, Nashville, on "Congestive Heart Failure and Hypertension." There was a general discussion of the papers, which were generally approved as being helpful and beneficial and valuable points were elicited.

The following physicians were in attendance: O. N. Bryan and Jack Witherspoon, Nashville; A. M. Lyons, J. W. Scudder, W. E. Gary, Hopkinsville; D. J. Travis, C. P. Moseley, Eddyville; J. G. White, G. E. Hatcher, Cerulean; E. N. Futrell, Wynant Dean, John Futrell, Cadiz; Paul L. White, Bumpus Mills, Tenn.; W. C. Hayden, J. M. Dishman, Frank T. Linton, I. Z. Barber, B. K. Amos, W. L. Cash, Princeton.

The Society adjourned to hold its next quar-

terly meeting in Princeton on the fourth Tuesday night in February, 1941, with the program to be prepared by the member of the program committee, residing in Princeton, W. C. Haydon.

W. L. CASH, Secretary.

**Pike:** Whereas, Divine Providence has seen fit to remove from our midst a beloved fellow physician, and,

Whereas, the Pike County Medical Society and the Medical Staff of the Methodist Hospital of Pikeville feel the irreparable loss of the late Dr. Reed Spencer Johnson.

Therefore, as an evidence of our very high esteem for our departed colleague and for our appreciation of the life of great service he brought to us, we, the members of the Pike County Medical Society and Medical Staff of the Methodist Hospital hereby wish to express our sincerest sympathy to the devoted wife, Mrs. Betty Johnson; son, Dr. J. K. Johnson; and daughter, Mrs. Helen Epperson, in this hour of their bereavement.

And Be It Resolved that the Secretary be directed to transmit a copy of these resolutions to the family of the deceased, and

Be It Further Resolved that a copy of these resolutions be spread upon the minute books of the Pike County Medical Society and the Medical Staff and the Methodist Hospital, and

Further Resolved that copies be sent for publication to the Journal and the Pike County News.

H. I. BERMAN,  
M. D. FLANARY,  
F. H. HODGES, Secretary.

**Jefferson:** The 219th stated meeting of the Jefferson County Medical Society was held Monday evening, December 16, with 132 members and guests present. F. M. Stites, who presided, called the meeting to order at 8:00 P. M.

The Secretary read the minutes of the previous meeting and they were approved as read.

Hugh R. Leavell distributed some cards for posting in physicians' offices about diphtheria immunization.

R. A. Griswold announced that Charles L. Scudder of Boston would be the guest speaker at the open dinner meeting of the Medico-Chirurgical Society at the Pendennis Club on December 27. Tickets for this dinner are \$1.50 and may be obtained from Dr. Griswold. All the members of the Kentucky State Medical Association are invited.

Austin Bloch stated that those doctors, like himself, who are called for a year's active

training in the Army will close their offices and so throw out of employment girls trained for work in doctors' offices. To prevent the decided waste of training if these girls are required to work in business offices, he asks that some arrangement be made to employ these girls in doctors' offices. He made a motion that the Medical Economics Committee be encouraged and empowered to investigate such possibilities in this line as exist and try to develop new ones. Seconded and passed.

The Secretary announced a communication from the Mississippi Valley Medical Society concerning an essay contest with a hundred dollar prize for an essay on a subject of general medical interest. This will be posted on the bulletin board.

The Secretary read a telegram from Dr. Heflin expressing regret for his absence and sending best wishes for a good meeting.

A motion was made, seconded and passed to send Dr. Heflin a telegram of greeting from the Society.

The resolution of the Medical Economics Committee concerning the care of patients of doctors entering military service was seconded and passed.

#### Scientific Program, 8:15 P. M.

Colored Film, "Treatment of Pneumonia," F. F. Schmidt, M. D., Chicago, Illinois.  
"The Pre-Marital Law."

1. "Why Our Profession Sought a Pre-Marital Law," A. T. McCormack, M. D.
2. "The Laboratory in Relation to the Pre-Marital Law," L. H. South, M. D.
3. "The Operation of the Pre-Marital Law in the Physician's Office," Fred W. Caudill, M. D.
4. "The Clinical Aspects of the Pre-Marital Law," Winston U. Rutledge, M. D.
5. "The Pre-Marital Law," Will H. Allen, for Harry W. Weeter, M. D.

W. B. TROUTMAN, Secretary.

**Adair:** The Adair County Medical Society met at Columbia, November 22, and elected the following officers for the coming year: W. J. Flowers, Columbia, president; J. T. Duncan, Columbia, vice-president; Todd Jefferies, Columbia, secretary-treasurer.

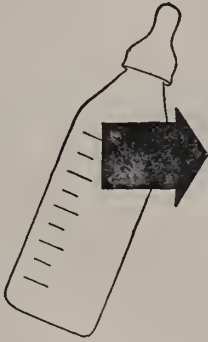
Our Councilor, Burr Atkinson, Campbells-ville, attended and presented a very interesting film on "Obstetrical Technique."

The following members of the Adair Society attended: W. J. Flowers, B. J. Bolin, J. T. Duncan, Todd Jefferies, and N. Allen Mercer, all of Columbia, and E. B. Atkinson of Canevalley.

N. ALLEN MERCER, Secretary.



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VOL. 39, No. 2

BOWLING GREEN, KY.

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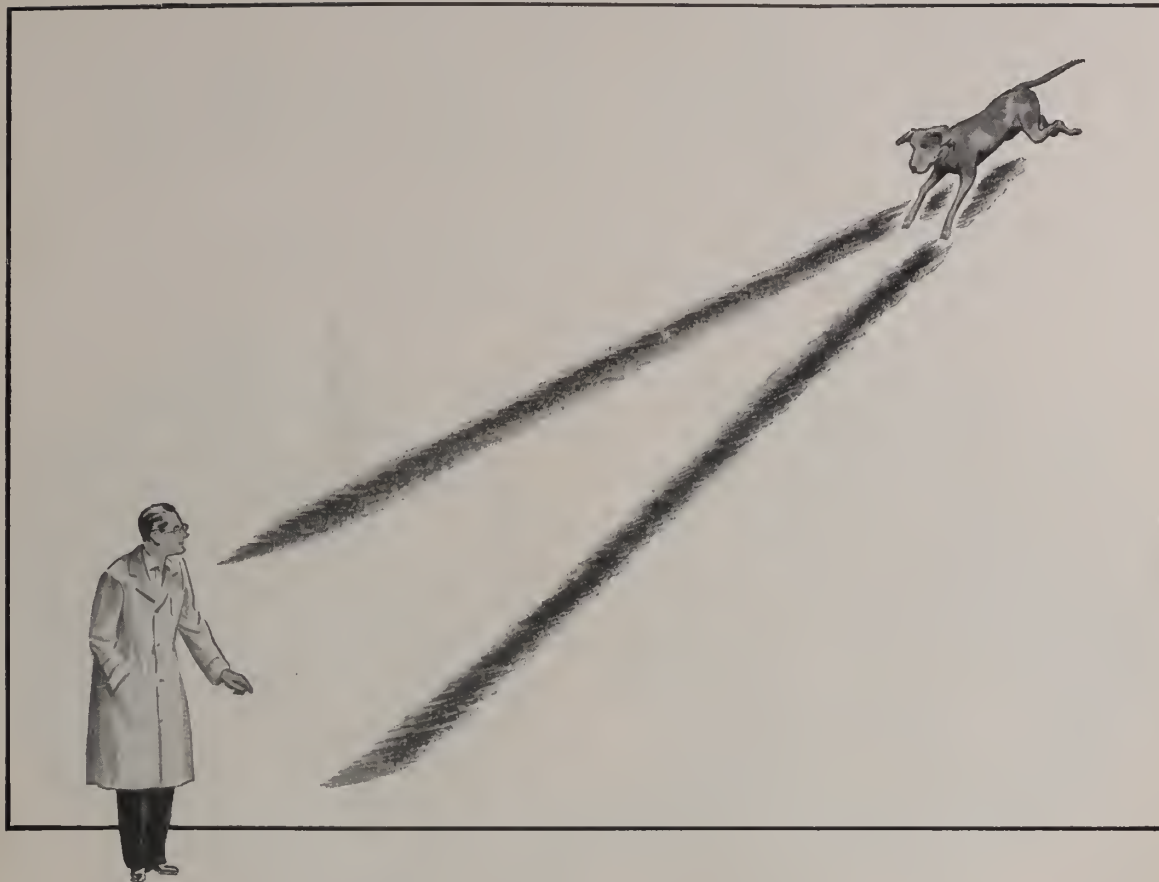
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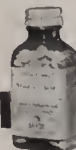
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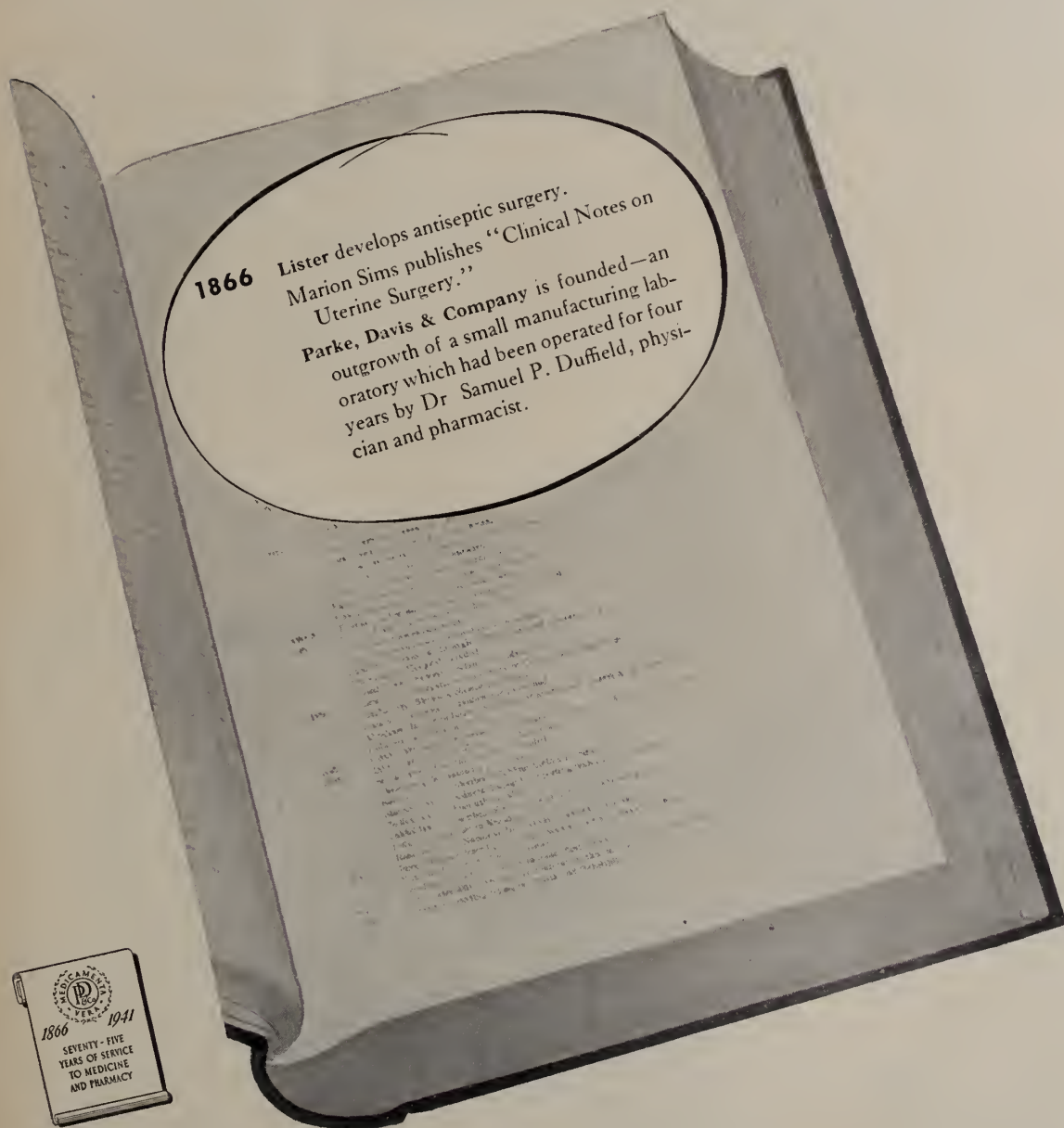
\*Proc. Soc. Exp. Bio. and Med., 1934, 32, 241-245

\*\*Laryngoscope, 1935, XLV, No. 2, 149-154



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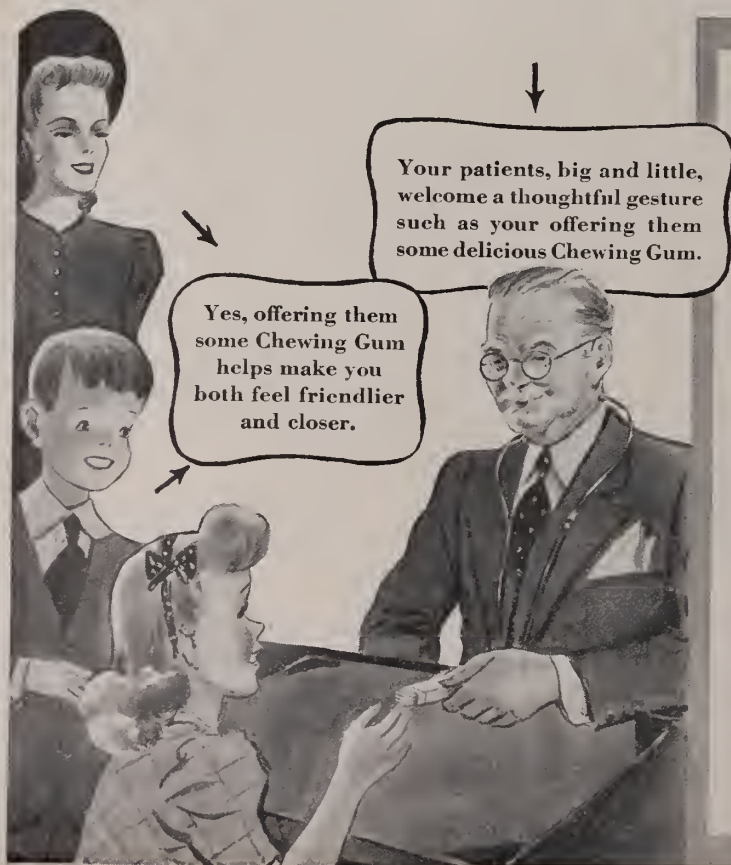
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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph. Gon. & Ven. Dis.*, 23, 201 (March) 1939.

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## CALENDAR OF COUNTY SOCIETY MEETINGS

COUNTY	SECRETARY	RESIDENCE	DATE
Adair.....	Todd Jeffries .....	Columbia.....	February 5
Allen.....	A. O. Miller.....	Scottsville.....	February 26
Anderson.....	J. B. Lyen.....	Lawrenceburg.....	February 3
Ballard.....	F. H. Russell .....	Wickliffe.....	
Barren.....	Rex Hayes.....	Glasgow.....	February 19
Bath.....	H. S. Gilmore.....	Owingsville.....	February 10
Bell.....	E. S. Wilson.....	Pineville.....	February 14
Boone.....	R. E. Ryle.....	Walton.....	February 19
Bourbon.....	B. N. Pittenger .....	Paris.....	February 20
Boyd.....	C. C. Sparks.....	Ashland.....	February 4
Boyle.....	P. C. Sanders.....	Danville.....	February 18
Bracken-Fendleton.....	W. A. McKenney .....	Palmouth.....	February 27
Breathitt.....	Philip Bress .....	Jackson.....	February 18
Breckinridge.....	J. E. Kincheloe .....	Hardinsburg.....	
Bullitt.....	George B. Hill.....	Mt. Washington.....	
Butler.....	G. E. Embry.....	Morgantown.....	February 5
Caldwell.....	W. L. Cash.....	Princeton.....	February 4
Calloway.....	J. A. Outland.....	Murray.....	February 6
Campbell-Kenton.....	Joseph H. Humpert .....	Covington.....	February 6
Carlisle.....	E. E. Smith.....	Bardwell.....	February 4
Carroll.....	H. Carl Boylen.....	Carrollton.....	
Carter.....	Don E. Wilder.....	Grayson.....	February 11
Casey.....	William J. Sweeney.....	Liberty.....	February 27
Christian.....	D. M. Clardy.....	Hopkinsville.....	February 18
Clark.....	R. E. Strode.....	Winchester.....	February 21
Clay.....	L. H. Wagers .....	Manchester.....	February 11
Clinton.....	S. F. Stephenson.....	Albany.....	February 15
Crittenden.....	C. G. Moreland.....	Marion.....	February 10
Cumberland.....	W. F. Owsley.....	Burkesville.....	February 5
Daviess.....	Irvin Bensman.....	Owensboro.....	February 11 & 25
Elliot.....	W. H. Joyner (Acting Sec.) .....	Sandy Hook.....	
Estill.....	Virginia Wallace.....	Irvine.....	February 12
Fayette.....	D. E. Scott.....	Lexington.....	February 11
Fleming.....	Roy Orsburn.....	Flemingsburg.....	February 12
Floyd.....	J. G. Archer .....	Prestonsburg.....	February 26
Franklin.....	Grace R. Snyder.....	Frankfort.....	February 6
Fulton.....	D. L. Jones.....	Fulton.....	February 12
Gallatin.....	J. M. Stallard.....	Sparta.....	February 20
Garrard.....	J. E. Edwards.....	Lancaster.....	February 20
Grant.....	Lenore Patrick.....	Williamstown.....	February 19
Graves.....	H. H. Hunt.....	Mayfield.....	February 4
Grayson.....			
Green.....	S. J. Simmons.....	Greensburg.....	February 3
Greenup.....	L. C. Bate.....	Greenup.....	February 14
Hancock.....	F. M. Griffin.....	Hawesville.....	February 3
Hardin.....	D. E. McClure.....	Elizabethtown.....	February 13
Harlan.....	M. W. Howard .....	Harlan.....	February 15
Harrison.....	W. B. Moore.....	Cynthiana.....	February 3
Hart.....	Gordon L. Green.....	Horse Cave.....	February 4
Henderson.....	J. Leland Tanner.....	Henderson.....	February 10 & 24
Henry.....	Owen Carroll.....	New Castle.....	February 13
Hickman.....	Layson B. Swann.....	Clinton.....	February 6
Hopkins.....	David L. Salmon.....	Madisonville.....	February 6
Jackson.....	Mary T. Arnold.....	McKee.....	February 1
Jefferson.....	W. B. Troutman.....	Louisville.....	February 3 & 17
Jessamine.....	J. A. VanArsdall.....	Nicholasville.....	February 20
Johnson.....	A. D. Slone.....	Paintsville.....	February 24
Knott.....			February 22
Knox.....	T. R. Davies .....	Barbourville.....	February 20
Larue.....			
Laurel.....	Oscar D. Brock.....	London.....	February 12
Lawrence.....	L. S. Hayes.....	Louisa.....	February 17
Lee.....	W. D. McCollum.....	Beattyville.....	February 8
Leslie.....	John H. Kooser (Acting Sec.) .....	Hyden.....	
Letcher.....	T. M. Perry .....	Jenkins.....	February 25
Lewis.....	C. F. Pennington.....	Vanceburg.....	February 17
Lincoln.....	Lewis J. Jones.....	Hustonville.....	February 21
Livingston.....	C. M. Fischbach.....	Smithland.....	
Logan.....	E. M. Thompson.....	Russellville.....	
Lyon.....	H. H. Woodson.....	Eddyville.....	February 4
McCracken.....	J. V. Pace.....	Paducah.....	February 26
McCreary.....	R. M. Smith.....	Stearns.....	February 3
McLean.....	Alan R. Will .....	Calhoun.....	February 13
Madison.....	Robert L. Rice .....	Richmond.....	February 20
Magoffin.....			

COUNTY	SECRETARY	RESIDENCE	DATE
Marion.....	W. E. Oldham.....	Lebanon.....	February 25
Marshall.....	S. L. Henson.....	Benton.....	February 19
Martin.....			
Mason.....	C. W. Christine.....	Maysville.....	February 12
Meade.....	S. H. Stith.....	Brandenburg.....	February 27
Menifee.....	E. T. Riley.....	Frenchburg.....	
Mercer.....	J. Tom Price.....	Harrodsburg.....	February 11
Metcalfe.....	E. S. Dunham.....	Edmonton.....	
Monroe.....	Geo. E. Bushong.....	Tompkinsville.....	
Montgomery.....	D. H. Bush.....	Mount Sterling.....	February 11
Morgan.....			
Muhlenberg.....	E. L. Gates.....	Greenville.....	February 11
Nelson.....	R. H. Greenwell.....	Bardstown.....	
Nicholas.....	T. F. Scott.....	Carlisle.....	February 17
Obio.....	Oscar Allen.....	McHenry.....	February 5
Oldham.....			February 4
Owen.....	K. S. McBee.....	Owenton.....	February 6
Owsley.....	W. H. Gibson.....	Booneville.....	February 3
Ferry.....	D. D. Turner.....	Hazard.....	February 10
Pike.....	F. H. Hodges.....	Pikeville.....	February 17
Powell.....	I. W. Johnson.....	Stanton.....	February 3
Pulaski.....	M. C. Spradlin.....	Somerset.....	February 13
Robertson.....			
Rockcastle.....	Lee Chestnut.....	Mount Vernon.....	February 7
Rowan.....	A. W. Adkins.....	Morehead.....	February 10
Russell.....	J. R. Popplewell.....	Jamestown.....	February 10
Scott.....	A. Y. Covington.....	Georgetown.....	February 6
Shelby.....	A. D. Doak.....	Shelbyville.....	February 20
Simpson.....	L. R. Wilson.....	Franklin.....	February 11
Spencer.....			
Taylor.....	W. B. Atkinson.....	Campbellsville.....	February 6
Todd.....	B. E. Boone, Jr.....	Elkton.....	February 5
Trigg.....			February 26
Trimble.....			
Union.....	E. Bruce Underwood.....	Morganfield.....	February 4
Warren-Edmonson.....	W. O. Carson.....	Bowling Green.....	February 12
Washington.....	J. H. Hopper.....	Willisburg.....	February 19
Wayne.....	Frank L. Duncan.....	Monticello.....	
Webster.....	C. M. Smith.....	Dixon.....	February 28
Whitley.....	C. A. Moss.....	Williamsburg.....	
Wolfe.....			February 3
Woodford.....	George H. Gregory.....	Versailles.....	February 6

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# KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

VOL. 39, No. 2

BOWLING GREEN, KY.

FEBRUARY, 1941

## PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION

The American Medical Association advocates:

1. The establishment of an agency of federal government under which shall be coordinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American System of democracy.

## EDITORIALS

## THE PRESIDENT'S MESSAGE

It is indeed a privilege to bring greetings and good wishes for the New Year and to express the hope that individually contentment, happiness, good health and success may be the portion of each and every doctor in Kentucky. The Organized Profession must meet the challenge of the hour and fulfill in a worthy way its just obligations. The press only recently discussed pending legislation to be introduced by Senator Wagner of New York for an appropriation in the interest of National Health and it is incumbent that the medical profession sponsor measures adequate and advisable and direct the course of all commitments relative to public health. Kentucky is essentially an agricultural state which presents problems peculiar to her people and it is our task to chart a program best suited to the needs of her citizenship. The suggestions here made do not conflict with the Platform of the American Medical Association but accentuate certain features peculiarly applicable to local needs.

1. Adequate medical service in every community includes doctors, dentists, pharmacists, hospitals, technical equipment and an abundance of nurses, especially trained to fill the requirements of each community. An excess of city nurses cannot meet small town or rural requirements and the restrictions in training schools are conducive to the more frequent utilization of untrained or practical nurses in such localities.

2. The health unit, if properly organized and conducted under the leadership of a capable, tactful and conscientious health officer, prevents disease, lowers mortality and extends life. Every assistance should be given its legitimate functioning and its powers and limitations should be recognized and rigidly enforced.

3. Good roads through every section of every county at all times are essential. A hard surfaced road by every farm should be the goal. This enables those slightly sick to visit the doctor; those seriously ill to secure him and permits comfortable ambulance service for those to be hospitalized.

4. A portion of the gasoline tax should be expended in each county on the cross

roads for every taxpayer is entitled to his or her pro rata of such tax.

5. Each county should make adequate annual appropriation for the hospitalization of its indigent sick, nor should political expediency determine its beneficiaries.

6. County or community hospitals strategically located should be sponsored locally with State and Federal aid as required. Special provision for the tubercular indigent is imperative, and we must protect our mental unfortunates by the high character, efficiency and continuance of qualified officials and personnel in our State Institutions. Governor Johnson has consulted freely with the Advisory Committee in making appointments and a grave responsibility rests on the Medical Profession which should be accepted as a sacred trust and held inviolate in the interest of Kentucky's unfortunates, and for the honor of the profession. Justice demands that future administrations adhere strictly to the same lofty ideals and practical application.

7. The development of a community conscience which recognizes Christian, educational and adequate medical service as just for every individual in every part of our Southland.

Trusting the future may bring blessings to our citizenship through unselfish and generous Service of an enlightened profession is my New Years wish.

AUSTIN BELL.

## THE PROGRAM

Plans for the 1941 program are now in the making. Dr. E. L. Henderson, President-Elect, of the State Medical Association, and Dr. M. J. Henry, President of the Jefferson County Medical Society, may be confidently relied on to do their level best to make the meeting this year outstanding. To this end, however, the active cooperation and constructive help of all members of the Association are essential.

As a member of the Program Committee on several occasions and as chairman of this committee under the presidency of Dr. C. C. Howard, I am all too familiar with the difficulties incident to producing a program satisfactory to all members of the Association. It is, however, the earnest desire of the committee this year to satisfy as large a proportion of the Asso-



ciation's membership as may be practicable and to see that the subjects discussed cover, as far as time and other circumstances permit, all the important phases of the great art and science of medicine. The Councilors in the various districts will be consulted as to subject matter and as to speakers available for the program in their respective districts. The secretaries of the various county societies are requested to bring this matter up before their members at an early date and promptly inform the committee as to their wishes. This should be done as early as possible, in order that those submitting papers may have time properly to prepare them.

The section on Eye, Ear, Nose and Throat has again been invited to cooperate, and it is sincerely hoped that the invitation will be accepted. Such cooperation is of great benefit to both the specialist and the general practitioner. The round table discussions, inaugurated at the Harlan meeting and included in subsequent programs at Louisville and Paducah, will again form a part of the program. It is also hoped to have on the program two or three members of the dental profession outstanding in their specialties.

Constructive suggestions are invited from any and all members of the Association. If you have any suggestions, please send them in at the earliest possible moment. If you yourself desire to read a paper or wish to have a special subject discussed, write immediately to the Chairman of the Program Committee.

JAMES H. PRITCHETT, Chairman,  
Program Committee.

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#### PEDIATRIC CONFERENCE

The Pediatricians of Louisville under the leadership of Philip F. Barbour are planning another post graduate course in Pediatrics to be held at the Children's Free Hospital, Louisville, beginning Wednesday, April 30, at 9 o'clock in the morning and every Wednesday after that for ten weeks, or until June 25th. This will be the ninth successive year that the course has been given and it has been growing in popularity each year.

Each week the interesting cases in the Hospital are presented by the interns with free discussion by the members of the Staff and the attending physicians. All the modern methods of diagnosis and treatment

are presented in connection with these cases. The major diseases are lectured upon and in addition specialists in the collateral branches, such as heart and nervous diseases, skin diseases and so forth, give timely talks.

Any one who is interested may write to Dr. W. W. Nicholson, Secretary, 423 Heyburn Building, Louisville, Kentucky.

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#### IT CAN BE DONE

Dr. Gordon Park Jackson, Health Officer of Toronto, Canada, a city of 800,000, reports that his city did not have a single case of diphtheria in 1940. This world's record for a city of Toronto's size in the control of one of the most dreaded preventable diseases of childhood did not occur by accident. It was the logical and direct result of an intelligently planned and actively prosecuted educational campaign by health authorities to secure the cooperation of the general public, especially parents, in immunizing preschool children. For ten years past, Dr. Jackson and his assistants had sought by every available means to persuade the parents of every newborn child to have the child immunized between the ages of six and nine months. To this end every medium at their command was utilized—lectures before parent-teacher associations and civic and business organizations; radio addresses, moving pictures, posters, newspapers and the distribution of literature. Every school in Toronto was visited and susceptible pupils immunized. In this way, the great majority of children who were not protected during the preschool age were rendered immune to the disease. At the close of last year 80 per cent of all the school children in the city had been re-tested and found to be immune.

It is distinctly encouraging to note the progress which Kentucky has made within the last few years in the control of diphtheria. This progress becomes all the more striking when we contrast the prevalence of diphtheria in the State in 1921 with the incidence of the disease in 1940. In 1921, 4,082 cases of diphtheria were reported in Kentucky, with 652 deaths. That was a diphtheria death rate of 26.9 per 100,000 population. In 1939 cases reported totalled 590, with an aggregate of 90 deaths—a death rate of 3.2 per 100,000 population. In 1940, the preliminary figures show a total of 374 cases, 38 of which proved fatal. This gives us a tentative diphtheria

death rate last year of 1.3. Had the diphtheria death rate of 1921 prevailed through each of the past twenty years, 7,275 persons, largely children under five years of age, in Kentucky would have died from a disease which we know how to prevent and should prevent.

While it is probably too much to hope that the time will soon come when diphtheria in this country as a whole will be altogether a historic disease, that is an attainable goal in any and every community in the land. The same means employed in Toronto with such successful results will, if similarly employed, produce equal success in any community anywhere. Science has given us the means; the medical profession and public health workers have the knowledge. All that is necessary is to pass this knowledge on to the general public and persuade parents to put it into universal practice.

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### SCIENTIFIC EXHIBITS

The excellent cooperation of the exhibitors in the past has made the scientific exhibits at the Kentucky State Medical Association Meetings more instructive and an important part of the State Meetings.

Dr. Roger Lee of Boston, during a recent visit to the State meeting, stated that scientific exhibits presented were superior to many of the State meetings he had attended.

The committee will endeavor to make 1941 scientific exhibits the best yet. The facilities will be excellent. All physicians desiring space for booths, please notify W. O. Johnson, M. D., Chairman, Scientific Exhibits Committee, Louisville.

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### AN IMPORTANT MEETING

The American Academy of Pediatrics will hold a meeting of Region 2, the Southern Group, in Richmond, Virginia, on April 24th and 25th. These meetings will be open to any one who is interested in any way in the problems of the pediatricians. At a later date the completed program will be published in the JOURNAL. In the meantime any physician who wishes to attend the meeting can secure information from Dr. Philip F. Barbour, Louisville, State Chairman of the Academy.

### SCALENUS ANTICUS SYNDROME

FRANKLIN JELSMA, M. S., M. D.

Louisville

The scalene syndrome is relatively new as a clinical entity, yet this symptom complex of the upper extremities, being mechanical in origin, has undoubtedly been with us always. As a causative mechanism for the production of varying degrees of disability of the upper extremities it is yet often overlooked and not infrequently an erroneous diagnosis is still made of a cervical rib, inflammatory or toxic neuritis, bursitis, Raynaud's disease, or various cord, bone or joint disturbances.

The once common and time honored entities of inflammatory and toxic neuritis are now thought to be quite rare.<sup>1</sup> Considerable doubt exists concerning the actual existence of a toxic neuritis, resulting from sources of infection elsewhere in the body. Peripheral nerves are especially resistant to local or direct inflammatory processes. Most always neuritis is of chemical origin, a vitamin deficiency or the result of direct nerve compression.

It is for these reasons that I wish to emphasize this syndrome and in so doing analyse one hundred and twenty cases, placing special emphasis on the symptomatology and the end results.

#### HISTORICAL

As long ago as 1906, John B. Murphy,<sup>2</sup> indirectly referred to the scalene muscle as the cause of some of the symptoms in cases with cervical ribs. In 1927, in a paper on cervical ribs, Adson,<sup>3</sup> discussed in detail the mechanism by which the scalene muscle produced neurologic and vascular symptoms. He mentioned the breadth of the attachment of the scalene muscle to the rib and also the angle that the muscle subtends with the first rib. He found that it was unnecessary to remove the anomalous cervical rib to relieve the symptoms, and suggested sectioning of the muscle instead. Torelli,<sup>4</sup> in a study of a large number of cases of cervical ribs, found that only 9 per cent of these patients presented any symptoms at all.

Naffsiger in communication with Ochsner,<sup>5</sup> was first to realize that practically the same neurologic and vascular symptoms occurred without the presence of a cervical rib. With pain and numbness and other symptoms occurring without a cervical rib, and only 9 per cent of the cases with cer-

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Read before the Kentucky State Medical Association, Lexington, September 16-19, 1940.



vical ribs complaining of symptoms, the importance of the presence of the rib became minimized and the part played by the scalene muscle was soon recognized. In 1935, Ochsner<sup>5</sup> discussed the symptomatology and mechanics of the syndrome in great detail and reported six cases.

There have been many explanations offered for the cause of this symptom complex, and so far, no one explanation is suitable for all cases. It is agreed, however, that the scalene muscle, because of a spasm, or because of hypertrophy, or because of the angle subtended on the first rib, produces pressure upon the trunks of the brachial plexus and the subclavian vessels, and in this way gives rise to the usual symptoms.

In the traumatic cases, undoubtedly a spasm of the scalene muscle sometimes occurs. This elevates the first rib and causes pressure symptoms. The scalene muscle is innervated by nerves originating at the site of the compression, which in turn causes more irritation and produces a neurogenic contraction of the muscle and, as it were, a vicious circle. For some reason or other, hypertrophy of the scalene muscle occurs and this, in itself, occupies more space and causes compression of the adjacent structures. This may be the result of prolonged neurogenic contraction caused by some irritative mechanism. Todd<sup>6</sup> and Jones<sup>7</sup> have tried to explain the mechanism of compression on the basis of a faulty anatomical development.

#### SYMPTOMATOLOGY

There are two types of symptoms, those produced by vascular compression, and those produced by compression of the nerve trunks of the brachial plexus. The neurologic signs originate from both the somatic nervous system and the sympathetic nervous system, but primarily the former.

An analysis has been made of 120 cases, seen in the past four years. An attempt has been made in each case to secure relief for the patient by palliative means. Fifty have come to operation—many have been re-examined several times and all have been contacted lately.

Ninety-five per cent of the cases studied presented symptoms of pain, and of these 84 per cent complained of pain in the shoulder, 95 per cent in the arm, 33 per cent in the forearm, 24 per cent in the region of the seventh cervical posterior spinous process, and 25 per cent in the elbow. There were many combinations of these pains. For instance, in the typical case, the patient complained of a dull pain

in the shoulder, arm, forearm, and occasionally of pain that radiated to the posterior spinous process of the seventh cervical vertebra. Pain was referred to the spine of the scapula in 12 per cent of the cases.

Sometimes the pain may gradually subside but usually it recurs later and is progressive in nature. A characteristic of this lesion is that the pain is increased by using the arm and repeated movements such as rotation or extension of the neck, sweeping, typing and even driving, aggravate it. Lifting is often completely out of the question. It is quite frequently impossible for the patient to elevate the arm to comb the hair or brush the teeth. Such actions cause excruciating pain. A quick movement, such as grasping for a hat when it was blown off, caused so much pain that one patient fainted. One thing is certain, and that is there is not an exact pattern of pain.

Practically always pain can be elicited by compression of the anterior scalene muscle. This was true in 100 per cent of our cases. I feel that this is almost a prerequisite before a diagnosis of a scalene syndrome can be made. However, not all cases in which one can elicit tenderness on pressure over the scalene muscle is by any means a scalenus anticus syndrome. One way to determine definitely the nature of the syndrome is by the injection of the scalene muscle with novocain as mentioned by M. Gage<sup>8</sup>. This usually temporarily relieves the patient of pain, due to the relation of the scalene muscle, which in turn allows the first rib to drop, thereby reducing the angulation of the trunks of the brachial plexus, as well as providing more room between the rib and the clavicle.

Numbness, which is most frequently confined to the ulnar distribution, occurred in 59 per cent of the cases. There was a dull, tingling, numb feeling, yet there was usually no objective loss of sensation. This was most frequent in the ulnar and ring fingers and the medial aspect of the hand and forearm.

Compression of the somatic nerves may also produce atrophy of the musculature supplied, usually the intrinsic muscles of the hand. Fibrillary twitchings of the muscles of the forearm, shoulder and shoulder girdle have been noted.

Sympathetic involvement is shown by vaso-motor spasm which results in cyanosis of the hand, reduction of temperature and diminished capillary action of the

finger nails, all of which may lead one to suspect Raynaud's disease.

The circulatory signs are those due to compression of the subclavian artery and vein and evidenced by an obliteration of the pulse, or a partial reduction of the pulse volume when the head is turned toward the side of the lesion and a deep inspiration is taken. Changes in pulse were noted in 52 per cent of cases. Forty-one per cent showed changes in blood pressure, the affected arm having a distinctly lower systolic pressure, sometimes as much as 20 or 30 points. In one case the blood pressure could not be registered in the affected arm.

There was a tendency for the shoulder of the affected side to be elevated and a noticeable fullness of the supraclavicular space on the side of the lesion. The patient preferred to sit in an armchair so that the shoulder could be elevated. Sometimes a sling was worn to support the arm.

The diagnosis of anterior scalene syndrome is not difficult if one keeps the condition in mind. Recognition of the fact that many cases of pain in the upper extremity are included in this syndrome is important.

To further illustrate this lesion, two typical cases are reported.

#### CASE REPORT

Case I—I. H., female, age 50, was first seen October 28, 1937. Three years before, a dull, aching pain occurred in the left arm, forearm, and hand. In the meantime, there had been periods of relief of varying intervals, but the pain had continued to return and gradually had become more severe. Use of the extremity in any way increased the pain. Numbness in the ulnar distribution, especially at night was complained of bitterly. Her sleep had been interrupted for periods of weeks so that she had become extremely nervous and discontinued her work as a secretary.

Examination showed her general physical condition to be good. Neurologically, aside from the left upper extremity there was nothing abnormal found.

The left arm could not be elevated over 50 per cent of normal. Abduction was likewise impaired and it was impossible to place the hand on her back. The hand felt tight and swollen to her. She thought that probably she had arthritis in the joints of her hand and fingers, but all one could see was a slight cyanosis.

There was a fullness of the left supraclavicular space, and the left shoulder was held higher than the right. Pressure over

the anterior scalene muscle produced local tenderness as well as increased the dull, aching soreness.

Rotation of the head to the left, extension of the neck with a deep inspiration produced a marked reduction of the pulse volume. There was 15 points difference in blood pressure of the left extremity as compared with the right.

During the next six months the patient was given vitamins in large doses, physiotherapy, and had been in bed off and on several times but did not receive satisfactory relief. She was again referred to me on March 25, 1938, her condition having incapacitated her during this time and caused her considerable suffering.

On March 26, 1938, an anterior scalene section and a neurolysis of the trunks of the brachial plexus was performed on the left side. This gave her immediate and complete relief.

The patient was next heard of on September 14, 1939. She complained of pain in the right shoulder, the deltoid region, arm and forearm. She said that the pain was gradually extending downward. She was still able to work.

Examination at this time revealed limitation of motion in the right upper extremity. This was not quite as severe as what it had been formerly in the left upper extremity before operation.

There was pain on pressure over the anterior scalene muscle. Pulse in the right upper extremity was diminished when the head was turned to the right and a deep inspiration was taken. Blood pressure was 10 points lower on the right side. Palliation was advised.

July 10, 1940, she returned stating that the pain had progressed and that numbness was becoming more pronounced in the hand especially at night, and again she was becoming very nervous and exhausted because of pain and lack of sleep. She requested that the operation be performed on the right side, which was done on July 11, 1940. She left the hospital four days post-operatively and has been relieved since.

Case II—M. M., female, age 43, was first seen July 3, 1940. She had sustained an injury to the lower lumbar region and the right cervical region 8 months before. She was hospitalized and treated for the crushed twelfth dorsal vertebra after the injury. Although she had noticed pain in the right upper extremity immediately after injury, this complaint was secondary compared to the suffering caused by the



lumbar injury. A hematoma was noticed in the supraclavicular region and in the course of time, after the usual discoloration caused by such a lesion, the hematoma was absorbed, but pain in the shoulder in the region of the spine of the scapula and the seventh cervical spinous process continued to increase. The arm then became involved, later the forearm and hand. Pain at one time was definitely extended over the median nerve distribution into the hand.

After three months the symptoms caused by the lumbar injury had subsided but the symptoms of the right upper extremity had increased. She was returned to the hospital where active physiotherapy, vitamins, and endocrine products were administered for a period of three to four months.

When first seen, the patient was still hospitalized, was complaining of extreme pain and it was with a good deal of reluctance that she would attempt to remove the wrap to expose the arm and shoulder. The arm was held in a sling, the fingers and hand were markedly cyanotic and cold. The fingers were smooth and shiny. All forms of motion of the upper extremity were limited because of pain. No useful function could be performed with this extremity. The right shoulder was definitely higher than the left. There was a fullness in the supraclavicular area. Pressure over the anterior scalene muscle produced excruciating pain.

Turning the head to the right and with a deep inspiration, the radial pulse was obliterated. Blood pressure in the right arm was 10 points lower than that in the left.

There was definite numbness and a burning pain extending down into the palm of the hand and middle and ring fingers. Objectively there was no sensory loss demonstrated.

On July 11, 1940, an anterior scalene section was performed and a major part of the procedure was occupied in freeing the trunks of the plexus from dense, fibrous adhesions which presumably had been caused by the hematoma. She secured immediate relief from pain and began using the arm shortly afterward. Within less than a week she had left the hospital free of pain, but with some limitation of motion that gave every evidence of improving day by day.

#### CONCLUSIONS

The scalenus anticus syndrome has been emphasized by a discussion of the symp-

tomatology in detail and illustrated by two typical cases.

In a further analysis of my records in 120 cases, it was found that 31 sustained injury and can be considered as produced by trauma. It was noted that far better results were obtained if these cases were operated early rather than palliated. One can better palliate those cases that are not traumatic in origin.

Seventy non-operative cases were observed over a considerable period of time and they received therapy consisting of vitamins, massage, heat, hydrotherapy, etc. Of these, 5.7 per cent reported that they were cured, 10 per cent reported that they had some relief, and the remaining 85 per cent had shown no improvement. Of the operated cases, 50 in number, 45 received complete relief of pain. Many were completely relieved immediately after the operation, while in some, pain of a minor type continued for a few weeks, post-operatively. Three received incomplete relief and complained of occasional soreness in the spinous process of the seventh cervical vertebra or in the region of the scapula. Two received only about 50 per cent relief.

It is our belief that surgery offers the most satisfactory results for cases suffering from a true scalene syndrome. It will quickly and effectively relieve suffering and from an economic standpoint will allow the individual to return to work, who might otherwise remain incapacitated for weeks or even many months. It is important, however, to rule out all other possibilities and definitely establish a diagnosis. When this has been done the surgical results have been very satisfactory.

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#### DISCUSSION

R. A. Griswold, Louisville: I think one of the most interesting developments in medicine in the past few years has been the change in our outlook on what we used to call neuritis, the kind of thing we used to pull tonsils, teeth, appendices, and gall-bladders out for. It apparently is becoming generally recognized that

except for the cases of chemical toxic neuritis and those with definite vitamin deficiency, practically all the rest of them are due to mechanical pressure. I am speaking of peripheral neuritis, sciatica, and this upper extremity syndrome. We now know that almost all cases of sciatica are due to pressure on the cauda equina or the nerves from a herniated nucleus or from something outside the spine and pelvis, down through the piriform muscles. The same thing is true, I think, of the neuritis of the upper extremity and most of these cases are due to the scalenus syndrome.

Of the two types, the traumatic and the non-traumatic, I think the traumatic cases are much easier to handle. They do not do well under conservative therapy, but in my experience, at least, the operative results have been much better. In the non-traumatic cases I think we are justified in trying vitamins and in trying to improve the patient's posture. I recall one case in particular of a patient who had had a cardiac operation, who had a soft spot in front of his chest where his ribs were absent. He was unconsciously trying to protect that soft spot by pulling his shoulders over. He got a nice bilateral scalenus, which was immediately relieved when he resumed normal posture.

I don't know of any operation that is more successful, more satisfactory to do, or even more dramatic, than an operation on a scalenus under local anesthesia. When you cut the last band of fascia underneath the scalenus muscle, the patient says, "Doc, you got it, my pain's gone."

**John D. Campbell, Louisville:** We have to give these neurosurgeons credit sometimes, and I think this is one of the times. They have taught us about the herniation of the nucleus pulposus as well as the cause of other so-called neuritic pains.

The scalenus syndrome interests me from the standpoint of medical neurology. We find medical symptoms presented by these patients, and I think this syndrome should be of interest to both medical men and surgeons. For instance, a patient complains of a symptom related to pain down the arm on the inner aspect, as Dr. Jelsma brought out; the lower part of the brachial plexus is the one most frequently involved, consequently the pain most frequently radiates down the inner aspect of the arm, such as we find complained of in coronary disease and angina pectoris.

Dr. Jelsma has gone into the anatomy of this condition very well, but I should like to bring up something about the evolution or the history of this condition. He mentioned Dr. Adson of the Mayo Clinic who used to operate on these cases from the standpoint of the cervical rib. The cervical rib most frequently projects out

from the transverse process of the seventh cervical vertebra, therefore lying behind the brachial plexus with the scalenus muscle anterior. That throws the brachial plexus on a sort of squeeze, with the interior division of the plexus most frequently caught in that sharp angle as described by Dr. Jelsma. Dr. Adson used to remove this cervical rib, but eventually he noted that when the scalenus anticus muscle was cut across, relieving the pressure upon this nerve, the patients got the same relief that they did from removal of the rib, which was quite a complicated operation. So the operation as practiced today is comparatively simple.

The neurological symptoms Dr. Jelsma has beautifully brought out.

I should like to say something about a patient with this condition who I think presented a little different symptom from that which we ordinarily see, and it will at the same time show you how to approach these cases in order to work out a diagnosis. Whenever a patient has a cervical rib you can x-ray and see that. If we have patients such as Dr. Jelsma has described, we can attribute those symptoms to the cervical rib, and usually transection of the scalenus anticus muscle will relieve that pressure, but some of these patient do not have a cervical rib and we cannot rely upon the x-ray, then, to prove that the scalenus anticus syndrome is the condition present in such a patient.

The patient I wish to tell you about was a man who complained of some vague pains in the region of his shoulder, also radiating down his right arm plus an interference with the blood supply of that arm; for instance, if he did hard work and pulled his arms down quickly, cyanosis occurred in the right arm. Upon examination of this patient it was noted that if you allowed him to raise his own arm, as it reached above the horizontal plane, you no longer felt a pulse. If you raised his arm for him you could continue to feel a pulse with the arm up. What happened was that as his arm passed the horizontal plane, the scalenus anticus muscle contracted, squeezing itself against the subclavian artery, which lies immediately beneath and thus shutting of the pulse. A transection of the scalenus anticus in that case relieved the symptoms.

Dr. Jelsma did not have time to go into the theories about the cause of this condition. It has been discussed from the standpoint of the thoracic cage. I want to ask Dr. Jelsma this question. Why does a person go through life, reach forty or fifty years of age, and not have any of these symptoms, and with no history of trauma suddenly complain of the symptoms associated with scalenus anticus syndrome?

**C. F. Long, Elizabethtown:** I don't know anything about this syndrome, but I want to talk



just a few moments about this last case that Dr. Jelsma reported. The lady he reported was in an automobile accident December 14th, coming from our Governor's inauguration. The other two people in the automobile were killed, one out right, and the other died six weeks later. We thought at the time she had almost had her neck broken, and we did find out later through Dr. Shields of Taylorsville that she had a slight compression fracture of the twelfth dorsal vertebra. She was sent to the Baptist Hospital and stayed on a flat bed for about three months and came home with a brace to protect the spine, a brace designed to hold her shoulder up. She complained quite a bit about raising her shoulders up, she complained of pain in the arm, and then she began to complain of what we thought was a neuritis or an injured nerve from the automobile accident but since the case has turned out as it has I believe this brace protecting her vertebra possibly had something to do with the contraction of the muscle and cut off the circulation and the nerve supply.

She came home from the hospital, after being there three months, and stayed home about six weeks and gradually became worse. Sedatives did not relieve her. She could not sleep and she got very nervous. We sent her back to the hospital and the doctor who had taken care of her being out of town, we called another doctor, one who thought she needed some physiotherapy. It seemed she was getting stiff in that arm, and I thought somebody might train her how to use the muscles and get her use back. With about two months of that in the hospital she seemed to be getting worse, and then Dr. Jelsma was called in and diagnosed the case and did this operation. About four days after the operation she came home and said she left the pain in the operating room. She has had complete relief since then. Of course, she gradually had to get so she could get this arm back up and use it, but now she is driving an automobile, and after this I certainly will know where to send a patient who has symptoms like that.

**Thornton Scott, Lexington:** The essayist has brought out the very disagreeable and agonizing symptoms found in this condition. I think it might also be pointed out that sometimes situations can arise which are more dangerous to health. I have seen an instance of thrombosis of the brachial artery occur, necessitating embolectomy, which was carried out successfully in a patient with this syndrome. I wonder if any of Dr. Jelsma's patients had shown thrombosis or gangrene.

Another thing I should like to ask is if he had ever noted the appearance of so-called neuropathic arthritis in the extremities involved in this way. We sometimes see, in section of the brachial plexus, patients who develop more or

less typical involvement of the joints, typical rheumatoid arthritis. I have not seen that happen in scalenus anticus syndrome. I wonder if he has.

I should like him, in closing, to say a little bit about his opinion on what I recall Naffziger postulated as a test for the presence of types of scalenus anticus, namely, reproduction of symptoms by sharp extension of the head away from the side of the lesion. I may be wrong about this, but I think that was referred to as being diagnostic, at least highly suggestive.

**George H. Gregory, Versailles:** I think a type of thing that we in general practice often see is that one of our patients who is rather obese and suddenly decides of his own volition to diet and rather quickly loses 25 to 30 pounds, comes in complaining of considerable pain in his arm, which is hard to explain to him until he understands what happens to the scalenus muscle in these situations.

**Franklin Jelsma, (in closing)** I wish to thank you all for your discussion. Of course, in this sort of paper you cannot go into details as you want to; there is not time, and there are too many things to discuss.

In regard to Dr. Campbell's remark about why the old people suffer from this lesion, or individuals who have lost weight; I think that can be explained on the premise that there is so much space between the first cervical rib and the clavicle; that is given; it varies with the weight and posture, and that accounts for the fact that posture and both loss and increase of weight will diminish or change that space between those two bony structures, which is the place where the pressure on the nerve roots and the vessels occurs. When one has a drooping of the shoulders because of lack of exercise, or posture, or work, the space is diminished between the first rib and the clavicle, which in turn compresses the structures between. These are the trunks of the brachial plexus before they branch into the brachial plexus, the subclavian artery and vein, and the scalenus muscle. The scalenus muscle keeps these structures on a taut stretch internally and they can't slide inward on account of the fact that the muscle is attached to the rib, yet when the muscle is sectioned they slide in and have plenty of room.

In regard to Dr. Scott's question of thrombosis, I have never seen a complete thrombosis of a large blood vessel. However, there are many of them, if you notice, on the nerve trunks when you do a neurolysis and I think that is one reason you should do a neurolysis as well as a section.

As to neuropathic arthritis, I don't know definitely whether the joints themselves have actually arthritic changes, but I do know of and have seen a number of these individuals who

have a limitation of motion, not because of pain, because afterwards when the operation had been performed the pain was relieved, yet the joint was pretty well fixed, and this they were able to overcome in time by gradually running their hand up the wall, and through massage and other means. I don't know, in those cases, whether there were actual joint changes. Roentgenograms did not show any.

I think if one analyzes cases in this way: pain on pressure over the scalenus muscle, pain in the arm that is not accountable by a bursitis, joint disturbances, or localized nerve lesion, then if there are pulse changes and blood pressure changes, and limitation of motion of the shoulder, one probably has a scalene syndrome. If still you are in doubt, you can do this: infiltrate the scalene muscle with novocain, which will in turn, simply let that muscle relax and the first rib fall and your symptoms clear up as long as the novocain lasts. In those cases you can make your diagnosis very definitely, and surgery can be used afterwards.

#### THE PROBLEM OF DRAINAGE IN OPERATIONS UPON THE BILE PASSAGES AND GALL BLAD- DER

GANT GAITHER, M. D.

Hopkinsville

Surgery of the gallbladder and bile passages has, during the period of my active surgical practice, undergone a most interesting span of development as far as the technique of the surgery and the method of intra-abdominal handling of the case is concerned. I began doing active surgery in 1910 and have therefore followed this development during a period of thirty years so that the extent of these changes has necessarily been considerable.

Very early in my own surgical work in the abdomen, I began to try, wherever possible to avoid drainage and especially in the surgery of the upper abdomen in and about the gall-bladder and pyloric areas.

For the purpose of this paper I have taken a series of 543 cases in which major surgical operations were performed upon the gall-bladder or bile passages and will try to show something of the tendencies that have developed in regard to drainage in this work.

We early found that drainage in the upper abdomen was a frequent cause of severe and crippling adhesions about the

pylorus, giving rise to digestive symptoms that made the patient most miserable and instead of being relieved by his gall-bladder surgery, became a confirmed dyspeptic. The necessity often arose to re-operate these cases for their relief.

Drainage was also felt to be the cause of prolonged bile drainage from a cystic duct stump after clean cholecystectomy as the result of the mechanical presence of the tube over the ligated duct and the lack of complete closure of the abdominal cavity so as to secure the absence of diaphragmatic pull upon the tube. In addition, we always felt that when the abdomen was tightly closed there was an intra-abdominal pressure which militated in favor of the closure of the stump without leakage.

Where the drainage was placed within the common duct, there was the feeling that the tubing often caused mild necrosis of the inner lining of the common duct with later stenosis and frequently very prolonged fistulous tracts with drainage. In this particular work of choledochotomy, we feel that if after removal of the stones from the common duct, there could be proven a patent duct without swelling below the stones and on into the duodenum, that this clear pathway and natural drainage area for the bile would be a more logical discharge point than to lead the bile to the surface of the body through a tube with the accompanying disabilities above mentioned. We therefore started as early as 1923 in selected cases closing the common duct after removal of stones therefrom so that the bile would flow directly into the duodenum, yet not failing to provide a small tube drain nearby as a protective measure in the event of inadvertent leakage through the suture line. Of course this necessitated the acceptance of adhesions about the outer drainage but in most instances, it did make the period of convalescence shorter and the occurrence of stenosis negligible. By the saving of the bile loss, this also was a procedure that materially helped the body chemistry of these patients who often could ill afford the loss of such important body secretions.

In the earlier operations for chronic cholecystitis, the practice was always to drain the abdomen. Gradually the surgeons came to realize this was not entirely necessary and devised unique means to satisfy themselves how they might safely omit the drainage tube. I remember visiting a distinguished clinic about 1926 and seeing a famous surgeon recently dead,



doing a cholecystectomy. He ligated the cystic duct with chromic catgut and left the ends of this catgut long enough to come up through the gall-bladder bed and the abdominal wound, explaining he intended to close the abdomen without drainage (a new procedure for him) and felt that he had to have this chromic catgut guide to get back down to the cystic duct accurately and quickly in the event it were necessary to reopen the abdomen for leakage or other difficulty. Needless to say in a few months he discontinued this practice when he found he could safely ligate and close without drainage.

Many men for years have placed a small drain following cholecystectomy because of the thought that there might be an aberrant or supernumerary cystic duct (in addition to the normal which they had ligated) and that were it overlooked, bile leakage would occur. This is a real danger and one that could happen. Its rarity however makes such a cause for drainage negative, provided the operator will always watch carefully for a very thin bile spurt as he peels the bladder from its bed. It is my practice, immediately after the removal of the gall-bladder and the control of all hemorrhage, to place a clean gauze pack down the liver cleft and over the cystic duct ligation area and leave it a few minutes while preparing for closure. If a supernumerary duct is present, or leakage from any cause, then a slight bile stain will practically always show upon the gauze and will be a signal for search for the points, with its ligation or if it cannot be found, for drainage of the case.

Of course, during this period we saw the battle between the proponents of cystectomy and cystostomy go through their arguments not the least of which to my mind the fact that in cystectomy there was frequently the opportunity for closure without drainage and with the cystostomy the operator chose drainage and prolonged it in some idea that by such prolongation he would do the liver itself some benefit. Time has about settled the dispute and now most of the gall-bladders are removed. May I say here, I have frequently, where I have discovered one or two large gall-stones in the course of some other abdominal operation, and where there was no evident inflammation in the gall-bladder, opened the gall-bladder, removed the stones, closed the incision in the gall-bladder with linen and the abdomen without drainage and have never had cause to regret it. I would undertake such a procedure

only upon selected cases, and where cystectomy was inadvisable.

Another type of case in which I now rarely place a drain and which formerly was thought imperatively to demand one, is where, during the removal of a non-inflamed gall-bladder with or without stones, the bladder was inadvertently opened and bile spilled into the cavity. However, we open the jejunum and spill such material in doing a gastro-enterostomy and think nothing of closing it immediately without drainage. I therefore years ago desisted in drainage in those cases where the gall-bladder was accidentally torn during removal, even though bile and stones may have escaped, provided finally I could assure myself of the cleanliness of the peritoneum from all debris at the end of the operation. I have never had a case of peritonitis or other difficulty because of my technique in respect to this method of handling.

In the 543 cases operated during this period, there were 104 males and 439 females who were operated. This shows the well known preponderance of the disease for women as well as the probable other corollary, that men do not as easily submit to operation. There were only 10 Negroes in the list and here there were 5 of each sex, another interesting variation.

In the entire series, taking the acute and chronic, gangrenous and ruptured gall-bladders as they came during the years, there were 25 deaths or a mortality rate of 4.6 per cent. Of these there were 22 of them in the class of acutely inflamed gall-bladders and only 3 in the subacute and chronic conditions. I have omitted from consideration those patients affected with carcinomata.

In each of the 22 cases who died in the acutely inflamed class, the abdomen was drained and such drainage did not serve to prevent death, although such termination did not by any means always come from peritonitis. In many of the earlier cases, modern venoclysis for combating dehydration would undoubtedly have saved many of them.

Cholecystectomy was done in the series 426 times and cholecystostomy was done 94 times. The remaining cases were those of choledochotomy either with or without drainage. The cholecystectomy cases very rarely were drained.

The age limits were from 7 years to 88 but the middle years were in the great majority.

In reviewing the series, I find that the

end results have been satisfactory from about 80 per cent of the cases, most of whom reside in and around our territory and with whom we come in frequent contact. Those who were fortunate enough to escape the drainage tube have undoubtedly secured better functional after results.

My conclusions in regard to drainage are as follows: Drainage following operations upon the gall-bladder and bile passages is more important to safe guard leakage of bile than any other reason.

Drainage in those cases where there is no leakage but where infection is feared, has not always prevented the spread of infection to the peritoneum.

Conversely, lack of drainage has not been followed by a spread of infection or peritonitis in a number of selected cases.

The under surface of the liver, the peritoneum covering the stomach, duodenum and hepatic colon quickly seal together and have an excellent power of resistance to violent peritonitis, provided the source of infection is removed, bile leakage prevented and body fluids preserved at good levels.

I therefore drain very few patients now following operations on the gall-bladder and the bile passages.

#### DISCUSSION

**Irvin Abell Jr., Louisville:** In operative procedures upon the biliary tract there are certain conditions in which drainage is essential. It is our practice to employ drainage in every case showing gangrene, marked pericholecystic edema, inflammation, or abscess, demonstrable common duct and pancreatic disease, spillage of bile from the gall-bladder or cystic duct, the visible presence of bile in the beds of the gall-bladder and cystic duct, abnormal relationship of artery, vein and ducts which does not permit of satisfactory identification, and in those instances in which the separation of peri-cholecystic adhesions have left appreciable denuded surfaces. Following simple cholecystectomy in which ideal conditions are met, it is our habit to eliminate drainage. The "ideal cholecystectomy" in which we do not employ drainage is represented by that case in which the common duct is normal in size and condition, in which the head of the pancreas shows no increase in size or consistency, in which the relations between the cystic duct, cystic artery and common duct can be readily demonstrated, and in which the gall-bladder can be separated from its bed by a sharp dissection without exposure of liver tissue.

In 500 simple consecutive cholecystectomies, drainage was eliminated in 391 cases. The mortality in this series was 2 per cent, the 8 deaths including 5 bronchial pneumonias, 2 car-

diac failures, and 1 pulmonary embolus. It is of interest to consider that there were 74 cases of acute cholecystitis, of which but 30 were drained. We have in this experience with non-drainage encountered not a single instance where the failure to use a drain has contributed either to a mortality or to an increased morbidity. While reliance upon the criteria mentioned has apparently protected us against catastrophe, we are not so optimistic as to believe that what has happened to others may not happen to us.

To sum up our view concerning drainage after simple cholecystectomy, drainage is employed only where an indication for its use exists.

**J. G. Gaither,** (in closing): I do not know that I have anything more to add. The reports of the various cases by Dr. Abell are in line with results which we have had.

I wish to thank Dr. Abell very much for taking part in this discussion.

#### REPORT OF THREE CASES OF SUBPHRENIC ABSCESS

C. M. BERNHARD, M. D.

Louisville

On the surgical service of the Louisville City Hospital from July, 1937 to July, 1938, there were nine cases of subphrenic abscess diagnosed and operated. This report includes three cases that cover the subject to a certain degree as to diagnosis and treatment.

The first case is that of a 13 year old white boy with a three and one-half day history of cramping, epigastric pain which radiated to the right lower quadrant of the abdomen in about twelve hours. Nausea and vomiting were prominent at the onset. His bowels moved a small amount. There were no other attacks of abdominal pain. Examination showed a very ill, dehydrated boy, age 13, with a temperature of 101.2, pulse of 140, and respiration of 28. The abdomen was markedly distended, and there was generalized muscle spasm and tenderness most prominent in the right lower quadrant. No abdominal masses were palpated. The rectal examination showed diffuse tenderness most marked on the right. There were no masses felt by rectal examination. There was a leucocytosis of 12,800 with a predominance of young forms and polymorphonuclear leucocytes.

The day following admission, after the patient had had intravenous fluids, an ap-



pendiceal abscess was opened and drained through a McBurney incision. The appendix was not removed. The postoperative course was stormy. The temperature ranged from 101 to 102 for the first six days, then began spiking daily from 100 to 104 rectally, pulse 110 to 140, and respiration from 30 to 45 per minute. On the tenth hospital day the temperature was 104.

A bedside x-ray of the chest showed bilateral broncho-pneumonia. The liver was displaced markedly downward and there was a gas shadow above the liver. The position of the diaphragm was not determined. The findings were suggestive of a subphrenic abscess. Two days later, using local anesthesia, the abscess was drained on the ward, extrapleurally and retroperitoneally, by the method described by Halstead, which will be given later. A large amount of pus and blood escaped, which had the odor of *B. coli*. The temperature came down to normal the next day, but then began to rise to 104. The patient died four days later of general sepsis.

The second case is that of a male, white, age 56, who complained of a dull aching pain in the epigastrium of ten days duration. The pain became gradually worse, and finally the patient had to go to bed. He took a purgative and felt some better, enough so that he returned to work. Early on the day of admission, the pain became suddenly worse in the epigastrium and high in the right lower quadrant of the abdomen. There was no relation of the pain to eating. He had had a previous attack of this pain about seven years ago, which lasted several hours. His bowels had been moving well, and the stools looked normal.

Examination showed a moderately ill white male, suffering considerable pain. The temperature was 100.5, pulse 70, respiration 20, and blood pressure 140/80. The abdomen presented a board-like rigidity and tenderness throughout, most marked in the upper abdomen and in the right lower quadrant. The red blood count was 2,890,000 with a hemoglobin of 11.45 gms. The white blood count was 14,700, polys were 94, and the lymphocytes were 6 per cent. A flat plate of the abdomen was negative for air beneath the diaphragm.

Under spinal anesthesia, the abdomen was opened. There was a small amount of greenish-yellow fluid found in the peritoneal cavity. The stomach and duodenum were normal. The parietal and visceral

peritoneal surfaces were red and injected. The gall bladder was markedly distended, injected, thick-walled, and edematous. There were many recent adhesions binding it to the omentum and duodenum. A small perforation, that was leaking a grayish brown fluid, was found in the gall bladder near the ampula.

The gall bladder was removed. For about nine days following the operation, the temperature ranged from 100 to 103. The patient then began to spit up large amounts of a thick purulent sputum. Following this the temperature ranged from 100 to 101. An x-ray of the chest revealed slight pleural involvement and pneumonitis in the base of the right lung. There was a small amount of air beneath the diaphragm on the right overlying a fluid level, indicating a subphrenic abscess. Two days later exploration of the subphrenic space was done under local and cyclopropane anesthesia. A small amount of a thick purulent material was released. Undoubtedly, the abscess had been partially drained by an opening through the diaphragm into a bronchus. The patient had an uneventful recovery thereafter.

The third case is that of a 38 year old white male, with a four day history of pain around the umbilicus and the right lower quadrant of the abdomen, which later became generalized. He had vomited three or four times daily since the onset. The day before admission, he noticed an irreducible mass in his right groin, and he stated that he had had a hernia for years. His bowels had not moved for two days, and he had not voided for about 15 hours.

Examination showed an ill, dehydrated white man with a temperature of 101.2, pulse of 108, respiration of 24, and blood pressure of 108/75. His abdomen was moderately distended, and there was tenderness throughout, especially in the right lower quadrant. There was an irreducible right inguinal hernia. Rectal examination showed moderate tenderness but no masses on the right. The preoperative impression was a strangulated inguinal hernia. There was no laboratory work recorded on the chart.

Under general anesthesia, the abdomen was opened through a right rectus muscle-splitting incision. The peritoneum was covered generally by a fibrino-purulent exudate, and many loops of intestine were adhered by recent adhesions. The appendix was acutely inflamed, gangrenous and perforated. The next to the last loop of the

terminal ileum was twisted. The appendix was removed, and a Hendon type of enterostomy was placed below the volvulus. The temperature postoperatively ranged from 100 to 103 for the next two weeks. Seven days postoperatively a wound infection was found and opened to the fascia. Percussion of the left chest showed what was thought to be a high diaphragm. Four days later fluoroscopy showed a high fixed diaphragm, and a chest plate showed soft mottling throughout the left lung field and an area of opacity in the central part, suggesting an interlobar empyema. There was also a marked widening of the heart shadow with a contour suggesting pericardial effusion. A moderate amount of fluid was present in the left chest. Thoracentesis produced 900 c.c. of blood-tinged straw-colored fluid. On another occasion, thoracentesis at the seventh interspace posteriorly, after pushing the needle very deep, produced 300 c.c. of thick purulent material. Interpretation was subphrenic abscess with empyematous extension to the left chest.

Under local and cyclopropane anesthesia, the subphrenic space was explored by removing the twelfth rib subperiosteally. The erector spinae muscles were retracted and a transverse incision was made at the level of the spinous process of the first lumbar vertebra—through the bed of the twelfth rib and the attachment of the diaphragm. The kidney was displaced downwards. The parietal peritoneum was separated from under the surface of the diaphragm where a large indurated area was reached by the index finger. The finger was pushed through this mass and a large amount of purulent material escaped. A fenestrated rubber tube was placed in the cavity and brought out through the wound. The temperature subsided and the patient was discharged from the hospital in several weeks.

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When Mark Twain, in his early days, was editor of a Missouri paper, a superstitious subscriber wrote to him saying that he had found a spider in his paper, and asked him whether that was a sign of good luck or of bad. The humorist wrote him this answer and printed it:

Old subscriber: Finding a spider in your paper is neither good luck nor bad luck for you. The spider was merely looking over our paper to see which merchant is not advertising, so that he can go to that store, spin his web across the door and lead a life of undisturbed peace ever afterward.

## VOMITING OF EARLY PREGNANCY

EDWIN P. SOLOMON, M. D.

Louisville

The subject "Vomiting of Early Pregnancy" that has been assigned to me for today is indeed an interesting one and must be regarded as an important one. Certainly, any condition that can cause loss of life must be important. It may be said of this condition, just as of constipation and other common ills, that the multiplicity of treatments advocated bespeak the fact that the real cause is still obscure and no specific remedy for every case is as yet available.

I believe we can safely say that 50 per cent of all pregnant women have some vomiting during their pregnancy. Fortunately, many of them are extremely amenable to quite simple types of therapy; others require more active treatment. We like to see patients as early as possible in their pregnancy and try to avoid the occurrence of vomiting. I am confident that we, in the larger cities, do see most of our patients at an earlier time than those of you practicing in the smaller communities. At the first visit we attempt to impress upon the patient that vomiting usually occurs, either when the stomach is empty or too full. We are extremely emphatic, almost fanatic, in urging frequent small high carbohydrate feedings during early pregnancy. We go into detail with the patient advising that she have someone bring a small amount of food to her bed in the morning and that after eating she remain in bed a short time before arising; then suggest that she ingest something at not longer than two-hour intervals throughout the day and urge that she never eat, at any time, enough to be conscious of a feeling of fullness. If the patient appears to be high-strung or nervous we immediately start her on mild sedation; usually phenobarbital in 1-4 to 1-2 grain doses given three to four times daily. In my mind sedation is an important part of treatment, whether the vomiting be mild or severe. Psychotherapy should be begun early and we feel that this is one time when the woman should be "spoiled" and that she be allowed to live and do largely as she so desires. Vomiting frequently accompanies disagreeable tasks.

Investigations have been carried on by many workers in an attempt to discover the real cause of vomiting of pregnancy.



Attempts have been made to explain the vomiting as resulting from hormonal insufficiency of the suprarenal cortex.

Many years ago the hypothesis was advanced that vomiting in pregnancy might be associated with failure of the adrenals, and this failure was attributed to the adrenal medulla especially. On the basis of this theory adrenalin therapy was adopted and numerous favorable results were reported. Subsequently, however, it gave much disappointment, and now this therapy has been discarded almost completely. In recent years, however, investigators have led us to believe that it is not adrenalin but the cortical hormone that plays the leading role in vomiting of pregnancy. To substantiate these beliefs it has been pointed out that hypertrophy of the adrenal cortex takes place in normal pregnancy and atrophy occurs in fatal cases of hyperemesis, also there seems to be a disposition to vomiting in patients with latent, later manifest, Addison's disease; and also there seems to be clinical and pathological features common to hyperemesis and Addison's disease.

The precise function of the cortical hormone in pregnancy is unknown but it is thought to be concerned with the production of blood cholesterol and the increased fat content of the blood as seen in pregnancy. It also neutralizes toxins arising from body metabolism or from extraneous sources, increases liver glycogen and counteracts the increased secretion of the pituitary ketogenic hormone, thereby controlling fat metabolism.

To my knowledge, Dr. N. W. Kemp of Vancouver, B. C. was the first to advocate the use of suprarenal cortex therapy in vomiting of pregnancy. He reported 200 cases with definite success in 85 per cent of them. Since this report in 1932 numerable similar successful reports have appeared.

The suprarenal cortex is given orally in three grain tablets; giving usually three a day. If no improvement is noted after two or three days then we give it intramuscularly using 1 cc. of the solution daily; as symptoms decrease the interval is lengthened.

With the advent of vitamin therapy some men would have us believe that one of the vitamins will cure anything. Vomiting of pregnancy has come in for its share of experimentation with vitamins and Vitamin B<sub>1</sub> was elected to cure this condition. The underlying thought in using

Vitamin B<sub>1</sub> is that it aids in oxidizing the accumulation of lactic and pyruvic acids, which accumulate in the smooth muscle tissues. This, in turn, assists in carbohydrate metabolism.

McCarrison produced atony of the bowel and degeneration of the mucous membrane of the colon of monkeys by feeding diets lacking in B<sub>1</sub> but high in carbohydrate content. Perhaps we should routinely give Vitamin B<sub>1</sub> to patients on a high carbohydrate diet in order to minimize the likelihood of faulty carbohydrate metabolism as well as to avoid damage to the gastrointestinal tract.

It should be mentioned that Vitamin B<sub>1</sub> is not stored but that the body is dependent for its supply from the food intake—B<sub>1</sub> is excreted in the urine and feces and can be isolated from both.

For vomiting of pregnancy Vitamin B<sub>1</sub> is usually given in oral form, using tablets of 1000 units three times a day. If oral therapy is not satisfactory, injections of 1000 units each are given daily. There are reports of good results from this type therapy available and there have been reports of Vitamin B<sub>1</sub> and adrenal cortex, being used together, also favorable. Personally I have not been able to share the enthusiasm for intramuscular Vitamin B<sub>1</sub> and my results in a small number of cases have been disappointing. We have however, obtained remarkably good results in cases of moderate vomiting by using Vitamin B<sub>1</sub> orally, together with phenobarbital, giving 1000 units of B<sub>1</sub> and 1/2 grain phenobarbital three to four times daily. Because of our poor results with B<sub>1</sub> intramuscularly we cannot help but attribute the good results from the oral therapy to the sedative and to the extremely palatable alcohol base in which Vitamin B<sub>1</sub> is contained; probably sherry wine and phenobarbital alone would give us similar good results.

Some investigators have thought they were able to demonstrate a change in the production or excretion of gonadotropic hormone and they have felt that these hormonal disturbances were an essential factor in the production of vomiting of pregnancy. The investigations, however, on gonadotropic hormone excretion have been quite inconclusive; this is easily understandable inasmuch as the figures in a normal pregnancy are extremely variable and often very high. It is very questionable at this time whether one can distinguish between normal and pathological pregnancy from these readings.

Vomiting of early pregnancy has also been attributed to an allergy or sensitivity of the patient to her own corpus luteum hormone and it has been suggested that these patients be skin tested with progesterone and desensitized if found positive. Extracts of whole corpora lutea have been used, again with questionable results. We have obtained frequent good results with this substance, but since we believe that this is an almost completely inert substance when given to a woman we cannot help but attribute our good results with it to mental reaction—perhaps daily or tri-weekly visits to the office and the administration of sterile saline would have given us equally happy results.

Whatever the basic cause, we reiterate, vomiting does occur in a large percentage of pregnant women. I have attempted to outline the most common forms of conservative therapy and most of the cases will be relieved by one or more of the afore-mentioned treatments; some women, however, will continue to vomit.

Persistent vomiting with extensive loss of water and chlorides leads primarily to dehydration and alteration in the electrolyte pattern of the extracellular fluid and secondarily to starvation. Approximately 70 per cent of the body weight is made up of water; 50 per cent is intracellular and 20 per cent extracellular. The extracellular water is divided into interstitial water and blood plasma. The interstitial water including lymph, represents 15 per cent of the body weight. The vascular fluid accounts for approximately 5 per cent of the body weight. Body water holds electrolyte in solution, and changes following loss of electrolyte may be serious.

Changes in electrolyte due to abnormal losses of body fluid have frequently been described. We all are well aware that when vomiting is present the body loses water and electrolyte and may suffer from starvation. If the water loss is great there is not sufficient urine to excrete all urine solids presented to the kidneys. As gastric juice is composed chiefly of HCl, persistent vomiting causes a serious loss of chlorides. Chloride ions are lost in excess sodium ions. The structure of the blood plasma and interstitial fluid is almost identical, each containing sodium as the chief cation and chloride and bicarbonate as the chief anions. With the loss of chloride, as in vomiting, there is a compensatory mechanism which increases the bicarbonate proportion. This tends to produce a state of

alkalosis, or if the pH is normal, a compensated alkali excess will occur if chlorides are lost and if the individual is able to maintain a water intake sufficient to permit the kidneys to excrete all of the urine solids presented to them. Because no renal impairment exists there will be no increase in blood urea or non-protein nitrogen. The carbon dioxide combining power will be increased.

If the fluid intake is too small to permit the kidneys to excrete all urine solids, some will be retained. This produces a further change in electrolyte structure of the extracellular fluid. Some of the space formerly occupied by chlorides will be replaced by retained urine solids.

In the presence of starvation ketone acids form. As they are carried along with chlorides and bicarbonate, some bicarbonate will be displaced. The presence of acetone in the urine, in this instance, indicates a ketosis, not an acidosis.

As chlorides are lost, clinical symptoms develop, varying from weakness, vomiting and drowsiness to even twitching and coma. It is logical to assume that, as plasma chlorides are always decreased when vomiting of pregnancy is severe, the condition could be improved by the addition of chlorides. If renal function has been impaired, fluids must be forced. A logical treatment of hyperemesis gravidarum is as follows: (1) improve renal excretion, (2) restore a normal electrolyte structure, (3) remove abnormal ketone acids, and (4) maintain a normal fluid and acid base balance.

Allow me to elaborate briefly on these points. Renal excretion may be improved by administering isotonic, i. e. 5 per cent dextrose, intravenously. As urine solids will have been retained for some time in persistent vomiting, a large amount of urine is desirable and sufficient dextrose should be given to insure a urine output of 2000 to 3000 cc. per 24 hours. By giving isotonic dextrose in large quantities renal impairment will be overcome and retained urine solids will be excreted.

Secondly, in order to restore normal electrolyte structure chlorides must be replaced. Collier and his associates found the low level of plasma chlorides to be about 560 mg. per 100 cc. and serious symptoms are present when they drop to about 400 mg. Normal saline contains 8.5 gm. of salt in each 1000 cc. of water. When equal amounts of sodium and chloride are given, the kidneys must excrete excess sodium in order to allow the body



fluid to retain needed chlorides. It is important to restore the excretory power of the kidneys if the electrolyte structure is to be repaired by the addition of sodium chloride.

The amount of sodium chloride necessary must be determined. If an inadequate amount is restored vomiting will continue and there will be a continued loss of chloride. Collier and his co-workers have established an ingenious formula for determining the amount of salt necessary to raise the plasma chlorides to a normal level. They found that for each 100 mg. per 100 cc. that the plasma chlorides were to be raised 0.5 gm. of NaCl should be ingested for each kilogram body weight or 0.2 gm. for each pound of body weight. Thus by this formula it becomes an easy matter to restore salt and if the kidneys are excreting well a normal electrolyte structure will result.

Thirdly, in order to remove the abnormal ketone acids, the intravenous dextrose is satisfactory. 5 per cent dextrose is preferable to hypertonic solutions as it liberates more water although 10 per cent solutions have given satisfactory results frequently. DeLee, however, has reported two cases of collapse following use of hypertonic glucose and Warthen has had frequent fatalities in dogs. No untoward results have been reported when isotonic glucose is used.

Finally, maintain a normal fluid and acid-base balance. As the plasma chlorides are restored and as renal excretion is improved, the patient will show marked clinical improvement. Symptoms will recur if chlorides are lost and dehydration develops. It has been found that at least 4.0 gm. of sodium chloride should be ingested daily in addition to any loss by abnormal routes. 500 cc. of normal saline per 24 hours will furnish an adequate amount of salt if the chlorides have reached normal, providing there is no vomiting. Isotonic dextrose is then given in amounts large enough to furnish 2000 to 3000 cc. of urine output per 24 hours. As signs and symptoms disappear frequent small feedings will be retained usually, when adequate sedation is given; then, too, sodium chloride may be given orally with adequate water. The small 00 gelatin capsule will hold 1.0 gm. of NaCl.

Before concluding I wish to mention a final type treatment in these cases of vomiting of early pregnancy. I have not seen recorded and thus am not familiar with the number of deaths in the U. S. as the re-

sult of vomiting of pregnancy however, Bandstrup of Copenhagen reviewed the deaths in Denmark from this cause during the six year period from 1931-1937. That country with a population of 3.7 millions had 40 deaths reported from vomiting of pregnancy. During these years 224 pregnancies were interrupted on account of vomiting. Among these 224 patients, 17 died in spite of therapeutic abortion.

One's judgment is often severely tested in determining whether to terminate a pregnancy because of vomiting. Experiments have been made in an effort to find some test that would be of particular value to the physician for determining when he should do a therapeutic abortion. Investigations such as quantitative estimation of chlorine, ketone bodies and urea in the blood and urine, quantitative determination of bilirubin and others. Unfortunately none of these tests are dependable as yet for judging the proper time to interrupt pregnancy and still clinical signs and symptoms must be relied upon primarily.

It is extremely difficult to estimate the significance of the presence or absence of serious symptoms of hyperemesis; this is evident from the fact that death occasionally occurs.

I wish to mention seven things that seem to be extremely important in judging whether to do a therapeutic abortion. These are: elevation of temperature above 100 F. or persistent subnormal temperature, persistent increase in pulse rate over 100, jaundice, albuminuria, polyneuritis, ocular symptoms and psychotic changes.

Please do not infer that all these things need be present before a pregnancy be terminated; but please do regard any one of these symptoms as a serious warning and if the patient does not rapidly improve under treatment after one or more of these appear, then a therapeutic abortion should be done.

At this point I wish to mention a suggestion that was given me by Dr. Edward Speidel of Louisville, and one that certainly seems valuable. He believes that any patient that has a therapeutic abortion for hyperemesis should be given a blood transfusion prior to the procedure. Certainly this is a precautionary measure that may save a life. Theoretically, it would be sound to obtain blood from a normal pregnant woman, hoping to establish in the recipient a normal hormone balance; or perhaps, obtain blood from a patient only a few days post-partum. If this is not feasible, however, a blood trans-

fusion from any compatible donor should be given. Immediately following the therapeutic abortion active measures should again be instituted to establish a normal fluid and acid-base balance.

In conclusion allow me to say, or really to warn, that in estimating the effect of a therapeutic agent on vomiting of pregnancy we cannot help but keep in mind that this illness usually has a tendency to spontaneous recovery and that it is very amenable to suggestion, so that the patient not infrequently may be markedly benefited by any method of treatment.

#### SUMMARY

1. Vomiting of early pregnancy should be combated by small frequent, high carbohydrate feedings together with adequate sedation and psychotherapy.

2. Adrenal cortex and Vitamin B<sub>1</sub> seem to definitely benefit vomiting in these patients; they may be given either orally or intramuscularly and may be used alone or together.

3. Persistent vomiting must be actively combated by maintaining a normal fluid and acid-base balance.

4. Do not procrastinate too long before doing a therapeutic abortion in severe cases unresponsive to adequate treatment.

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#### DISCUSSION

**Stanley S. Parks, Lexington:** There is one very interesting thing to me about vomiting in pregnancy. When a patient comes to me about two or three months pregnant, I can usually figure when the vomiting is going to quit, namely, about the end of the third month, and I talk to the patient and go into it very carefully with her, about her diet, and so forth, and then say, "Well, I think we will be able to control this. We will start you on this or that treatment, and it will take just about two weeks or three weeks," I figure when the three months will be up, "and by that time I believe this will take care of it for you." You are a swell doctor when it quits; time does take care of most of the cases of vomiting, but not all of them.

There are those patients who are pregnant and are not desirous of being, and I believe they are the ones that give us the most trouble, more from the psychological standpoint than from any toxic condition that might be present. These patients I fear are not given as much attention as they deserve. We frequently have to suggest a change in residence for them. I don't know why it is, but frequently, to get these patients away from the husband will relieve the

vomiting; send them home to their mothers and the vomiting often ceases entirely.

We may take them to the hospital and they won't need any treatment while there.

One exaggerated case I recall very vividly was a girl who had been in the hospital a week and hadn't vomited since leaving home. The husband was out of town. She got a telegram from him that he would be in that night, and vomited immediately.

Water seems to be very disagreeable to the patient who is vomiting in early pregnancy. One of the first things is its discontinuance. I don't know of any drug that will help in the treatment of vomiting of pregnancy as much as Coca-Cola, at least that has been my experience. Possibly any carbonated drink will do almost as much. As Dr. Solomon has suggested, this is not, of course, given in large amounts, a couple or three ounces at a time in between the frequent feedings will suffice. This has been very beneficial.

The pathology that is associated with the vomiting of pregnancy, namely, the necrosis in the periphery of the lobule, with a deficiency in the glycogen content, should certainly be enough to cause us to use glucose without hesitancy, and frequently.

I would like to stress the point that Dr. Solomon made about flushing the kidneys. I think it is well to give a sufficient amount of glucose, and we usually give it in normal saline, enough to give a urinary output of two to three thousand cc. in twenty-four hours. Of course two or three thousand cc. given intravenously is not going to give that much output. I think it is customary too frequently to give 2,000 cc. daily. That is not going to flush the kidney sufficiently to get rid of the toxins that are not going through. The patient must be given three or four or even five thousand cc. within twenty-four hours. That is a great deal of punishment for a patient, but there are some that say a big dull needle is a lot of help, and it may be.

With regard to abortions in these patients, that, I think, is the hardest problem that I ever meet in the practice of obstetrics. It is particularly hard when you can look back upon the case of a friend that you have lost from early vomiting in pregnancy. Looking back over my few years of practice, possibly a very small percentage of those patients that are sent in for abortion were aborted; I don't believe it will run over ten per cent. In other words, the average patient that we see, who is quite ill, will respond very favorably to treatment. The deciding point about when to do the abortion is the problem. I feel that it is almost impossible to control a patient from any distance away. They leave you and get along well for a few days and then they say, "well, I am all right



now, I can do this, I can do that," and it isn't over a week or two until they are back in the same condition they were in before. They will make another trip to the hospital and go back and do the same thing over again. They won't continue to make these trips. They demand that something be done, and it is very difficult to decide whether or not you can let this patient go back home again, because, she can stand only so much. It behooves us all to be very careful about doing abortions, and I believe that a very small percentage are being done now in comparison to a few years back, but I believe that I have been made a little more lenient with my patients who are vomiting, after one sad experience which I hope not too many of you have had.

**Samuel M. Rickman, Paris:** I want to mention one or two things that have helped me a great deal in what little work I have done in obstetrics. First was a patient I inherited from another state, who came to me with a severe vomiting of pregnancy which had existed for five months; in other words, she was five months when she came to me. All the treatments that have been so ably outlined this morning were used, and none of them seemed to be any good. She was so sick that I hadn't made a complete pelvic examination at that time. I was trying to treat her at home. I took her to the hospital, and on speculum examination found about the worse eroded cervix that I have ever seen. I had an idea that the cervix might have something to do with the persistence of vomiting of pregnancy, but I was afraid to cauterize it for fear that she might abort. However, I cauterized the cervix thoroughly and immediately the vomiting stopped. I do not believe that hospitalization or any other type of therapy helped.

About a year later, a second patient came to me that I also inherited from another state, who was also five months pregnant, and had been vomiting severely all this time. Remembering my good results with the first patient, I told her that I thought she ought to have cauterization of the cervix, and, incidentally, I had examined her and she had an eroded cervix but not quite so severely as the previous patient. Upon telling her that, she said the doctor in the distant state had also found the eroded cervix and that he had advised her against cauterization. With a great deal of hesitancy on both her part and the part of the husband and myself, I cauterized the cervix and immediately the vomiting stopped. This patient was not hospitalized and no other therapy was used.

In my own private cases that I try to get early, if those patients have any type of erosion of the cervix, provided it is not the first or second period time missed, I cauterize the cervix in my office, and I think I have had very good

results from this type of therapy. I have never heard this type of therapy discussed and I would like for the essayist to discuss it.

In talking about the psychology of the patient, the first thing I do after examining the patient is to try to convince her that pregnancy and subsequent birth of the baby are physiological processes rather than pathological, and if she will take it that way and realize that she is not sick and is just as normal as can be, that it is just as physiological for her to have a baby as it is for her to eat, that fact alone will convince her, and usually it does more good than the medication advised. I think Vitamin B is a very good drug. I also think an ample supply of vitamins should always be given during pregnancy.

**Thornton Scott, Lexington:** I am not going to have the temerity to discuss the pregnancy aspect of it. I know very little about pregnancy, practically nothing from clinical experience.

There is only one point that I want to discuss in this most interesting paper, and that is the role of the adrenal cortex and the use of preparations of adrenal cortex.

Pathological examination of the adrenal is notoriously misleading and from it one is rarely able to draw accurate conclusions concerning the physiological abnormalities contingent on structural change. Structure of the adrenal gland is not very easy to relate to function. However, we have biochemical methods of determining the function of the adrenal and these are very accurate because in disturbances of the adrenal cortex there are certain disturbances in the blood electrolytes, and specifically of the level of the blood sodium. Before one can say that the adrenal cortex is not carrying on its function adequately, one has to demonstrate the lowering of serum sodium. It is well known by those who treat large numbers of cases of Addison's disease, full-blown Addison's disease, that these patients can be carried on for long periods of time with as simple a thing as common table salt, plus water, of course. One occasionally has to tide the patient over a period of Addisonian crisis with cortical preparations, and certainly if adrenal cortex deficiency is present in pregnancy it is not of the grade that we see in full-blown Addison's disease. Therefore, I should think that Dr. Solomon's salt and water treatment ought to fulfill all the therapeutic needs without the necessity of introducing a preparation such as adrenal cortical hormone. This is important, because those preparations at the present time I think are rather expensive, and as far as I know are inert when given by mouth. I wonder if one shouldn't have good experimental evidence and basis for giving oral adrenal therapy, since it is expensive, and since it is probably not effective. Of course, the intra-

muscular preparations, either natural or synthetic adrenal cortical hormone, are definitely effective and will result in the raising of blood sodium and in a decrease of urinary excretion of sodium.

I would like to hear Dr. Solomon discuss this point, because, as he so ably demonstrated, many of these preparations are useful from their psychotherapeutic point of view, and I am just wondering if possibly adrenal cortical hormone therapy might not be of that order.

**Edward Speidel**, Louisville: Fortunately we now have few mortalities in hyperemesis gravidarum. In consequence, of course, we are rather ignorant in regard to the pathology of the condition. We are taught that the condition consists largely in a deterioration of the liver cells. In two fatal cases in the Louisville City Hospital, the autopsy showed very little degeneration in the liver cells, but instead showed an extensive destruction of all the body cells. It is a good plan to keep that in mind.

A number of years ago Dr. Gruhitz of Detroit made investigations that showed that in toxemic cases the blood of a baby is incompatible with the blood of the mother and it may be that on that account you see these degenerative changes. At any rate, when patients die from hyperemesis they die in spite of the fact that they are taking an abundance of food, and they die suddenly, there is a collapse, and that will bear out the fact that there must be a general degeneration of the cells of the body that brings this about. In consequence, I think that in all severe cases of hyperemesis it would be well to fortify the mother's blood with blood of her own type and protect her against this degeneration by giving her a blood transfusion. Especially I advise you, before instituting interruption of pregnancy, to fortify the patient with a blood transfusion and if possible a blood transfusion of a postpartum patient, because it may be that the post-partum patient's blood contains useful antibodies.

When it comes to the treatment of vomiting of pregnancy, even the ordinary vomiting of pregnancy, in my experience the thing is largely neurotic and consequently the most important thing in both instances is, first of all, isolation of the patient. In the ordinary vomiting of pregnancy, I insist upon the patient having a room to herself, and, if necessary, going home to her mother. In the hyperemesis cases I will not conduct the case unless I can isolate the patient, if possible in a hospital, and if the husband especially, and the members of the family will remain away from the patient. In that way, fifty per cent of the battle is won. Thereafter there are simply the items of feeding the patient by the various methods, by the

intravenous use of glucose in normal saline, and, if you wish, the administration of deci normal saline under the breast in 1500 and 3,000 cc. units. My favorite method of feeding patients with hyperemesis, after I have given intravenous glucose for several days, is to introduce a duodenal tube and after the tube has entered the duodenum, to drain the gall-bladder with magnesium sulphate solution for an hour, then to pour an ounce of warm olive oil down the tube and drain for another hour. You will be astonished at the dark-colored bile that will escape in that way. Thereafter, you can feed through that tube ad libitum. To make the patient more comfortable, the duodenal tube is then pulled through the nose, which can be done very readily by simply passing a catheter through the nose, catching it with forceps in back of the pharynx, pulling it forward, sewing it to the end of the duodenal tube, and then pulling the duodenal tube through and passing the tube to the side of the face, and at the end of every three hours or so simply pouring the liquid nourishment down the tube.

I have had very little result with adrenal cortex. I appeared to have good results with Vitamin B<sub>1</sub>, which I always give intravenously. Whether that is psychic or not I am not able to say. All of those things should be used, and if isolation of the patient is practical, in many instances a cure will result.

**Edwin P. Solomon**, (in closing): I certainly am grateful to all you gentlemen for discussing the paper. I think we are all agreed that psychotherapy is the best therapy that we have in our armamentarium now.

Dr. Rickman made mention of cauterization of the eroded cervix. I cannot subscribe to the belief that erosion of the cervix is in any way related to the vomiting of pregnancy. I feel sure that my friend and yours, Dr. McCord, will feel the same way. We do have no hesitancy however, in cauterizing a badly eroded cervix during early pregnancy. We do a light cauterization and are careful to avoid the external os of the cervical canal.

Again, I cannot help but attribute the results from cauterization to psychic influences. Some one around me said, "Probably the odor from the cauterization did a lot." I am inclined to think that, and hospitalization alone did the work.

I am glad that Dr. Scott brought up the subject of adrenal cortex therapy orally. Personally I have not used it orally. I have used it intramuscularly, and contrary to Dr. Speidel, have gotten better results with that than with Vitamin B<sub>1</sub>. Whether my results are psychic or not I do not know. We have given the intramuscular adrenal cortex, one may say, unscientifically, only because we do know that pathology pres-



ent in the fatal cases of hyperemesis is so similar to that of Addison's disease that the clinical symptoms are very closely parallel.

I whole heartedly do not believe that any endocrine substance other than thyroid extract has any effect when given orally. I am just trying some of the hormonal substances orally, but until just recently I have not even attempted to use them. I cannot feel that any except thyroid has had good results when given orally. I have used a new anhydro-hydroxy progesterone orally in some cases and gotten good results in threatened abortion. Some of the estrogenic hormones are thought to be active orally, but I have never gotten results from them. Stilbestrol, a synthetic estrogenic hormone, seems definitely to be active when given orally.

I really appreciate Dr. Scott's bringing up that point, and I think it is important for us to remember that it probably will do no good for the adrenal cortex to be given orally; I do not think it is active.

Dr. Speidel's suggestion about the stomach tube is certainly valuable. We use it with gratifying results.

We attempt here to use a little psychotherapy and always use a pretty large Levine tube.

In closing, I want to thank you gentlemen again for discussing my paper and to say again, let's not flatter ourselves too much. The cases that are going to get well usually do so spontaneously and we are awfully good doctors and prognosticate that at the end of the third month they are going to get well, and most of them will; however, those unresponsive to treatment frequently will not be benefited by anything we do. Certainly hospitalization is important, and isolation is important.

#### **Sulfapyridine in Gonorrheal Conjunctivitis.**—

Sysi reports eleven cases of gonorrheal conjunctivitis in which he used sulfapyridine. In the first five, in addition to the oral administration of sulfapyridine, local applications of silver nitrate and of mild protein silver were given. In the other cases the local treatment consisted only in irrigations with physiologic solution of sodium chloride, but the improvement was the same in all cases. The sulfapyridine was given in the large doses that are customary in lobar pneumonia. In two cases, nausea and cyanosis appeared but subsided rapidly after the medication was discontinued. Although in the reported cases the local treatment was made superfluous by the sulfapyridine medication, the author admits that the material is too small to decide whether sulfapyridine will always do this.

## **OBESITY**

R. N. HOLBROOK, M. D.

Louisville

Throughout the centuries obesity has been a subject of continuing interest. The Talmud and the Bible contain numerous references to obesity. In the latter part of the nineteenth century obesity was much more common than at present. A mild degree of corpulence was thought to be normal and was frequently used as a yardstick in judging an individual's prosperity.

The increased incidence of cardiovascular diseases, diabetes mellitus and lowered life expectancy in the obese, which became evident from studies of statistics, particularly by the life insurance companies, has stimulated a great effort on the part of the medical profession to combat this unnecessary abnormality. Fashion which in its decrees, has sometimes been unmindful of health, has been of great help for now fashion says it is not stylish to be fat. The great general interest in sports has been another factor of importance in preventing obesity.

The control of weight has become a subject of great popularity among laymen and articles appear daily in the newspapers on diet and exercise. The omniscient Walter Winchell in advising his readers recently on the art of making a bay-window disappear gave the following worthwhile instructions: "Don't be lazy. Hold in the stomach muscles so they will harden. Sit tall, walk tall." Damon Runyon in commenting upon his experience with the Winchell method said that he found that the price of that advice is the same as the cost of liberty, that is, eternal vigilance, and that it takes a mighty watchful and patient fellow to follow it. He says he went around one time for days holding in his stomach muscles until his chest was out like a pouter pigeon's and then in one unguarded moment he relaxed and suddenly his bay-window popped outward and downward with such force that all his forward suspender buttons were carried away and he had to rush home for repairs holding up his trousers with both hands. Many of you along with the writer can appreciate Mr. Runyon's experience.

#### **ETIOLOGY**

A simple principle underlies any understanding of obesity. The body weight depends upon the balance between energy

Read before the Kentucky State Medical Association, Lexington, September 16-19, 1940.

intake and energy expense. If more energy as food is ingested than is burned, the surplus may be stored as increased weight; if less energy is ingested than is utilized by the body, there will be a decrease in weight. Obesity cases have been divided into two groups, exogenous and endogenous. Exogenous obesity is that form due to an excess food intake in an otherwise normal individual. Endogenous obesity is applied to those cases in which some other abnormality is at least a contributing factor to the onset of obesity. In the past two decades there was a great tendency on the part of clinicians to attribute obesity to endogenous factors, particularly, to abnormal functioning of the various glands of internal secretion. Recently it has become evident that exogenous obesity includes practically all of the cases usually seen in general practice. It is not always easy to understand why one individual will gain weight on a diet which is just sufficient to maintain weight in another individual. Von Bergmann(1) believed obesity was caused by a lipophilic tendency of the tissues, which results in rapid deposits of fat in the body stores from which withdrawal into the blood stream is difficult. This theory is supported by the recent work of Hetenyi(2) who studied the blood lipids in a group of thin people and in a second group of obese individuals, both having been fasted and then fed 60 grams of fat in the form of cream. He found that the fasting blood lipid level was lower in the obese which may account for his greater hunger. After the fat meal the blood lipid level was higher in the thin individuals than in the obese, which suggests that the tissues of the obese absorb fat more quickly.

Grafe(3) explains the development of obesity by means of a theory of "Luxus Konsumption." He believes the normal individual disposes of excess food by an increase in metabolic rate which burns up the excess energy. In the obese the metabolism stimulating mechanism, is impaired and energy is stored as fat.

The sensations of hunger and repletion, which are component parts of appetite, play an important role in the maintenance of weight. In the obese individual the sense hunger seems more continuous and the sense of satisfaction is dulled or absent. Wilder(4) suggests that rapid withdrawal of fat from the blood stream in the obese creating a demand for readily available energy, acts to increase hunger, particularly, for carbohydrates. This ex-

planation is based upon the theory of the lipophilic tendency of the tissues in the obese. Others believe that the threshold for the appearance of hunger contractions is abnormally low in the obese which would suggest an abnormality of the central nervous system. Food habits, undoubtedly, have a great effect on appetite. The simplest explanation for the onset of obesity in middle life when physical activities are curtailed, is that the quantity of food to which an individual has become accustomed remains constant despite a marked reduction in activity.

Goodman and Strouse(5) in an excellent review of the subject of obesity state that control of body weight by glands of internal secretion is rapidly assuming a secondary position. The glandular system controls the distribution of fat in the body, thus, explaining the various clinical types of obesity; but all of these cases will respond to proper restriction of food intake with a loss of weight. No glandular extract, except thyroid, unsupported by food restrictions, causes weight loss.

Obesity as an etiologic factor in disease is an important study. Hypertensive heart disease and coronary artery disease are more frequent in the obese than in individuals who are normal or below normal in weight. Gallstones, constipation and hemorrhoids are largely the results of the mechanical effects of obesity. Diabetes mellitus is frequently seen in the obese; as a matter of fact, obesity is probably the most common factor for the onset of diabetes. Gout, also, is more often seen in fat persons.

#### PROGNOSIS

The prognosis of untreated obesity is an unfavorable one. Life insurance studies have shown repeatedly that body girth and length of life vary inversely with each other. The longer the belt line the shorter the life line. Due to the greater incidence of hypertension, diabetes mellitus, coronary artery disease, gout, and other degenerative conditions, the life expectancy is markedly lowered for the overweight individual. It is, therefore, evident that if the serious consequences of obesity are to be avoided prophylactic treatment of obesity early in life, becomes highly important.

#### TREATMENT

The cure of obesity is exceedingly simple in the great majority of cases if carried out according to scientific principles and with careful attention to minute details. The treatment must consist, primarily in the regulation of the diet and, second-



arily, in the regulation of those factors which determine the body's need for energy. The best known systems of diet for obesity are based on essentially the same principle, namely to diminish the caloric value of the diet so far as it is consistent with the maintenance of nutrition and strength. The caloric content of the usual reducing diet varies from 1,000 to 1,600 calories.

During three years I have used a plan of treatment which makes use of a diet much lower in carbohydrate and fat value than are found in the better known diets. This diet has a value of 600 to 700 calories. It is a modification of the diet used by Strang, McClugage, and Evans(6) and is very similar to the diet prescribed in the case reported by Short(7) in which the patient's weight was reduced from 395 pounds to 156 pounds in 20 months with progressive improvement in health throughout the period and subsequently.

My usual procedure includes a careful history of the patient followed by a

thorough physical examination. An effort is made to determine the underlying cause of the obesity and a decision is made as to the suitability of the patient for a reduction cure. Not all fat people should attempt to lose weight. Nature never meant that all should conform to a common standard in this regard. Laboratory tests include a complete blood count, hemoglobin percentage, blood sugar determination, glucose tolerance test, and a measurement of the basal metabolic rate. The ideal weight is determined by the age, height, sex, physical build and other factors.

The diet prescription is now prepared. One gram of protein per kilogram of ideal body weight is allowed. This is increased by 50 per cent in growing children. The fat allowance is kept to a minimum, usually about 10 grams. A slightly increased amount of carbohydrate up to 50 grams is permitted. In order that there may be a greater variety of items in the diet a slight variation in the fat carbohydrate

TABLE ONE

## MENU

Carbohydrate 54 Gm.

Protein 79.7 Gm.

Fat 8.8 Gm.

Calories 614

## BREAKFAST:

	GM.	HOUSEHOLD MEASURES	C	P	F
Rolled Oats	30	1/6 cup	5	1.5	0.6
Orange	80	8 sections	5	0	0
Eggs	60	2 whites of egg	0	6	0
Cream (19%)	12	1 tablespoonful	0.6	0.4	2.4
Skim milk	180	3/4 cup	9	5.4	1
Tea or coffee		1 or 2 cups	0	0	0
Total for meal			22.6	13.3	4.0

## LUNCHEON:

Vegetable soup	200	1 cup	3.4	1	0
Cottage cheese	25	1 heaping tablespoonful	1	5.3	0.2
Asparagus—cooked	100	5 stalks	3	1	0
Beef, boiled, and freed of visible fat	80	2 slices 3" x 2" x 1/2"	0	24	2
Skim milk	100	1/2 cup, scant	5	3	0
Grapefruit juice	75	4 1/2 tablespoonfuls	5	0	0
Total for meal			17.4	34.3	2.2

## DINNER:

Broth (fat-free)	100	1/2 cup	0	2	0
Roast chicken (gross fat removed)	80		0	24	2
Broccoli—cooked	100	2/3 cup	4	3	0
Lettuce	100	1/3 head	2	1	0
Mineral-oil mayonnaise	30	2 tablespoonfuls	0	0.6	0.6
Bread	15	1/2 slice	8	1.5	0
Tea or coffee			0	0	0
Total for meal			14	32.1	2.6

content of the formula is necessary. Foods that may be used are lean meats with the gross fat removed, egg white, fish, skim milk, cottage cheese and gelatin which are high in protein; citrus fruits, vegetables containing 3 to 5 per cent carbohydrate and other foods that are high in bulk and low in caloric content. Mineral oil Mayonnaise supplies a salad dressing without adding utilizable fat. Bouillon or fat-free broth is satisfying and useful. A sample menu (8) for a person whose desired weight is 175 pounds is presented in Table One.

The patient is furnished a list of fruits and vegetables containing not more than 5 per cent of carbohydrate which he is allowed to substitute for the orange, grapefruit, asparagus, broccoli or lettuce. Any lean meat may be substituted for the beef or roast chicken. To insure sufficient vitamin intake a capsule, containing in concentrated form the daily vitamin requirement, is given. One gram of aminoacetic acid (glycine) in a vehicle of sherry wine is administered three times daily for the purpose of preventing muscular fatigability. For the hunger and weakness that sometimes occur between meals a piece of candy or one or two crackers is allowed. Reduction of fluid intake below 1500 milliliters daily and restriction of salt intake is useful in preventing water retention. Laxatives are given as needed for the constipation which frequently develops. Thyroid extract in adequate doses is prescribed. One grain three times daily is average but five or more grains per day is often required for patients weighing more than 200 pounds or in whom the basal metabolic rate is very low. Most patients experience a feeling of increased physical vigor and mental efficiency during its use; and the symptoms of hyperthyroidism such as tachycardia, nervousness and insomnia are rarely reported. I have thus used increasingly larger amounts of thyroid extract than is usually advised. If the patient is under 40 years of age and free of cardiovascular disease and other contraindications to increased physical activity he is supplied with a booklet (9) containing a series of setting-up exercises. He is advised to devote only five minutes to the exercises the first day and to increase this one minute each day. Walking, however, remains one of the most practical and effective ways of exercising.

An attempt is made to familiarize the patient with the plan and purpose of the treatment. He is urged to follow the re-

gimen exactly and is frequently reminded of the improvement in health and well-being that may be expected as a reward for his effort. A form is provided on which he is instructed to record daily, his weight, greatest abdominal measure and any unusual symptoms.

Follow-up visits are required twice weekly for two weeks and thereafter at weekly intervals. If, in the examination of the urine, diacetic acid or acetone is found the carbohydrate allowance is increased sufficiently to prevent further ketonuria. The basal metabolism test is made monthly and the dose of thyroid extract is so adjusted that a rate of 5 to 10 per cent above normal is maintained. If the resting pulse rate reaches eighty per minute no further increase in thyroid dosage is prescribed. The blood sugar determination is made monthly or more often if indicated. Should hypoglycemia develop the daily carbohydrate allowance is immediately increased to 100 grams. After the desired loss of weight has occurred the patient is placed upon a maintenance diet and instructed to reduce his fat and carbohydrate intake should an increase of 10 per cent above the optimum weight take place.

The result of this plan of treatment in twenty cases is presented in Table Two. It should be noted that every patient was not on the strict regimen during the entire period.

TABLE TWO  
Summary of Cases

Name	Original Weight	Final Weight	Loss of Weight	Days duration of Treatment	Age
M. A.	163	135	28	42	28
M. M.	168	142	26	90	30
R. H.	246	190	58	90	36
R. M.	192	164	28	56	37
W. Q.	218	189	28	60	41
B. Q.	142	128	14	60	15
L. W.	170	160	10	16	52
C. D.	189	168	21	90	60
C. C.	232	209	23	40	65
W. B.	130	120	10	30	15
W. B.	146	130	16	45	16
B. L.	145	130	15	50	16
R. A.	178	142	36	90	35
J. P.	146	141	5	19	52
B. R.	212	161	51	150	23
E. M.	149	138	11	30	48
C. R.	158	124	34	100	27
S. F.	218	190	28	45	37
E. P.	174	160	14	36	48
F. A.	192	175	17	40	34



## CONCLUSION

Excessive food intake is the most frequent cause of obesity and this principle must underlie any plan of treatment. A diet, adequate in protein content, very low in fat and carbohydrate, having a value of 600 to 700 calories, has been satisfactorily used by the author. Supplementary measures include concentrated vitamin capsule, fairly large doses of extract of the thyroid gland and moderate increase in physical activity. Data and results in a series of twenty cases are presented.

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## DISCUSSION

John Harvey, Lexington: Mr. President and Gentlemen: As Dr. Holbrook said something about selecting him to give this paper, I thought also of what is said about the church: the minister tells us all the bad things that are done and should not be done, and the ones who should hear them are not there. Among the doctors here I see that all the fat people have disappeared, and it is unfortunate they could not have heard this discussion.

I was asked to discuss this paper. I didn't exactly know why until I began to look up some references and saw that one Dr. J. Harvey wrote an article on corpulence and its treatment in 1868, in London. People like to eat, and yet they don't like to be fat and therefore we have the problem of obesity. When they come to a physician and want a pill or a liquid with which to reduce, they are very loath to take the reduction diet which is prescribed, and therein is the greatest difficulty in treating this condition.

There is often great discrepancy between the food which the patient says he eats and what some member of the family or friend says, which usually is, "Doctor, I wish you could see what he does actually put away." Fashion, as Dr. Holbrook has said, plus athletics, has helped a lot.

I remember one series in which the etiology of obesity was studied and in which the percentage of those who admitted overeating was about three per cent; about sixty-seven per cent of that group did admit that they were inactive,

so that the amount of activity does have some relation to obesity.

Having the problem, then we have certain disadvantages which this over-amount of flesh produces. I will not go into that except to reiterate what Dr. Holbrook has said, that first the unpleasantness of having too much weight, second, its effect upon the cardiovascular system, hypertension, and coronary disease, and third, the tendency to diabetes, send the patient to the doctor.

All investigations in which these clinical diseases have been studied have shown that there is an increase in the obese of these particular diseases.

In thinking of the etiology, I believe, as Dr. Holbrook said, that there is more and more tendency to think that eating and exercise have a lot to do with obesity and that the endocrines are only secondarily involved in the great majority of instances.

In a study made at the University of Iowa fairly recently, in which ordinarily obese persons were studied, and also a group in which there was myxedema, pituitary tumor, chronic encephalitis, and certain patients thought to have hypothalamic disorders, it was found they were obese in the main but that the obesity had preceded the appearance of symptoms of these various diseases, and then in many of them loss of weight occurred after these clinical syndromes were recognized.

I am very interested in the conception of the metabolism of obesity that Strang advanced which was also concurred in by Short, who reported the case that Dr. Holbrook mentioned, as reduced from 295 pounds. This conception was that whereas we are accustomed to thinking of the obese individual as having a lowered metabolism, as a matter of fact the heat production by those patients was quite in excess of normal when compared to the ideal weight, whereas a basal metabolism might be normal, (1.2 per cent in this particular case,) the actual heat production was plus 50 per cent, and in the beginning, as the weight was lost the heat production decreased and the basal metabolism further decreased. At that point, when the basal metabolism becomes lower, then thyroid medication is indicated.

The United States Census Bureau said that more than 100,000 Americans will die of pneumonia and influenza during 1941, and two-third of them will die between December and March.

During the last forty years the Bureau said approximately 6,000,000 persons, equivalent to the population of New York, have succumbed to these two diseases.

## ROENTGEN KYMOGRAPHY AS AN AID IN THE DIAGNOSIS OF CON- STRICTIVE PERICARDITIS

SYDNEY E. JOHNSON, M. D.

Louisville

Anatomically there are two types of adhesive pericarditis, external and internal. In external pericarditis the adhesions are between the outer surface of the pericardium and neighboring organs. This type would be called, more properly, pericardio-mediastinitis. In the type under discussion the parietal and visceral layers of the serous pericardium become adherent, thus obliterating the pericardial sac.

This condition is described in the older literature under the designation of *concretio cordis*. The adhesions may involve all of the pericardial space, or may be somewhat patchy in character. The pericardium is thickened by proliferation and invasion of fibroblasts. As the fibrous tissue contracts normal filling of the heart is prevented by constriction especially

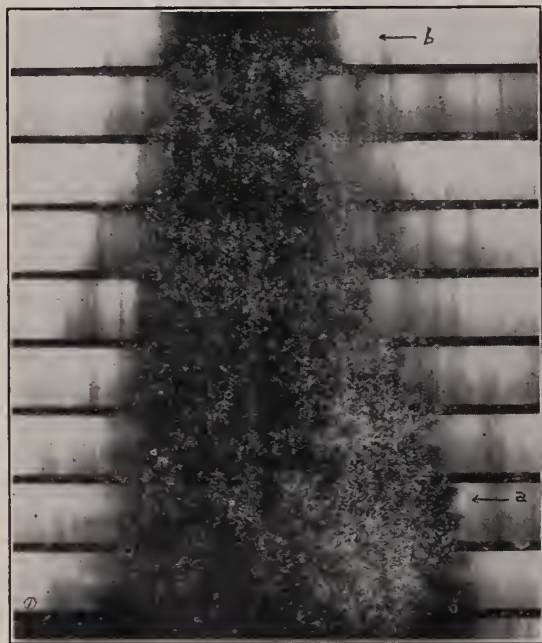


Figure 1

Roentgen kymogram of normal heart. The curves are read from below upward. The outward (diastolic) thrust of the ventricle (a) shows a period of rapid filling, a shorter period of slow filling and a final brief, sharp thrust, coinciding with the beginning of auricular systole. The sharp inward thrust represents ventricular systole. The aortic curve (b) is due to the normal expansile pulsation. The sharp outward thrust coincides with ventricular systole.

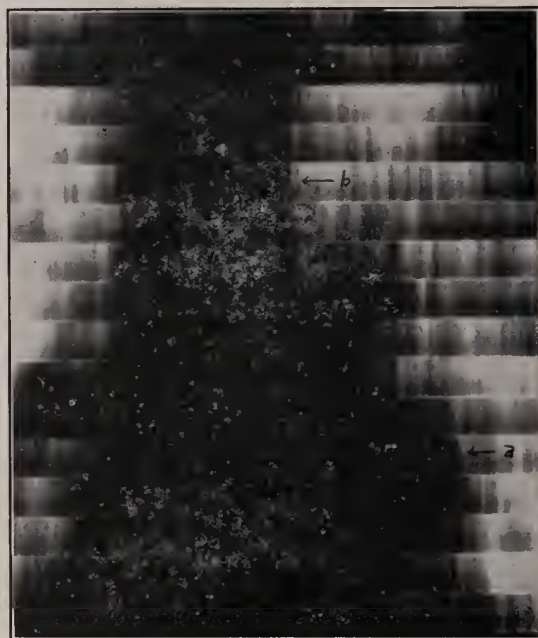


Figure 2

Kymogram of H. B., male, white, age sixteen years. The kymogram shows the typical diagnostic features of constrictive pericarditis—flat ventricular and aortic curves. Constriction prevents normal ventricular thrust. Aortic thrust is reduced or absent because of greatly diminished cardiac output (stroke volume).

around the mouths of the great veins.

Only in recent years has constrictive pericarditis received the attention it deserves. Older authors refer to it as a rare condition. The records of several thoracic surgeons contradict this assumption although it is likely that many cases still escape recognition. Failure to recognize the condition may be due largely to the fact that the examiner is not constrictive pericarditis conscious. The patient may present no symptoms directly referable to the heart, but constrictive pericarditis should be suspected in every patient who shows evidence of reduced cardiac output in the presence of increased venous pressure, and a small heart in the presence of failing circulation.

The importance of accurate diagnosis is emphasized by the fact that the treatment is different than in any other cardiac disease. There is only one treatment, surgical removal of the mechanical barrier to normal heart action. Decortication, removal of the adherent pericardium, has produced brilliant results in successful cases.

Roentgen kymography offers the most important recent advance in the diagnosis of constrictive pericarditis. By this method



the movements at the periphery of the heart and great vessels are recorded as a series of short characteristic graphs or curves. The curves represent movement at points on the cardiac border spaced one centimeter apart. A normal kymogram is shown in figure 1. The curves are modified in various cardiac diseases, characteristically in constrictive pericarditis.

In four City Hospital cases the diagnosis of constrictive pericarditis, by roentgen kymograph, has been confirmed, three on the operating table, one by autopsy. Many suspected cases have been excluded. Successful use of the method has been reported to the writer in personal communications from several other roentgenologists.

The diagnosis is based on two changes in the heart kymogram. There is characteristic flattening of the ventricular curves, and greatly reduced amplitude of the aortic curves. The flattening of the ventricular curves is due to reduced, or absence of, movement of the ventricular profile. The aortic curves are diminished in amplitude because of the greatly reduced cardiac output. Figures 1 and 2 illustrate the characteristic findings before and after decortication.

This patient was a sixteen year old

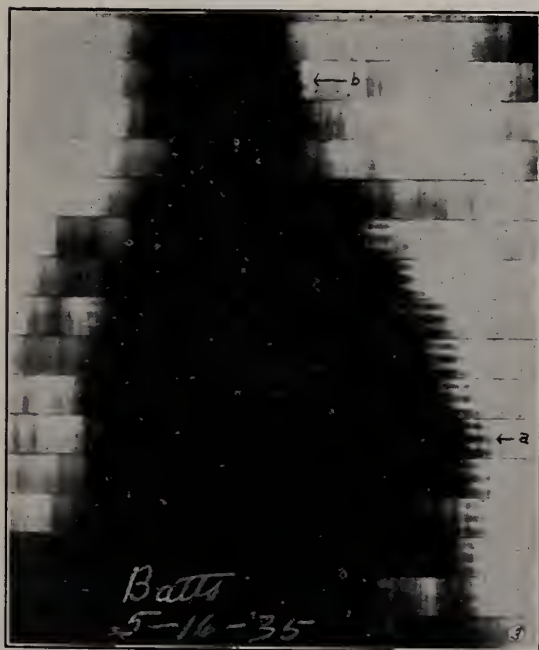


Figure 3

Same patient as Fig. 2, following decortication. Aortic curves restored to normal; amplitude of ventricular waves exaggerated due, probably, to preceding long period of limited myocardial function. The curves gradually assume normal form and amplitude.

white boy who had a history of repeated attacks of tonsillitis, but nothing else of significance until he developed the symptoms of failing circulation, edema, ascites, venous distention. The heart was small and quiet. The electrocardiogram showed low voltage. The diagnosis was confirmed by operation and biopsy.

In the writer's limited experience roentgen kymography has proven itself a sure and accurate method in the diagnosis of constrictive pericarditis.

#### DISCUSSION

**Wallace Frank:** I want to bring up one point that was mentioned in reference to the case of tuberculous pericarditis. The incidence conforms to figures presented by Blalock. He reported a series of cases subjected to pericardotomy and of these practically fifty per cent were tuberculous. Blalock brought out the point, especially in the tuberculous cases that the adhesions were exceedingly dense near the chief coronary vessels and that in taking off the pericardium there was a possibility of injury to these vessels.

**Joseph C. Bell:** I want to pay tribute to Doctor Johnson for the work he has done in bringing the Roentgen Kymograph to the attention not only of the physicians of Kentucky but of the United States as well. This diagnostic aid had been used to some extent by a very few examiners prior to the time that Doctor Johnson began to work with it. It was he, however, who showed some of the clinical applications of this diagnostic method and in my opinion was responsible more than any other investigator in this country for its present widespread use. His has been a very fine piece of work and one of which all of us can justly be proud for it was done by a member of this Society.

**W. B. Troutman:** I mainly rise to compliment Dr. Johnson for his work in this field. His work has certainly been a forward step in the diagnosis of Constrictive Pericarditis.

As to the clinical findings in these cases we have the triad of first, the small and silent heart; second, increased venous pressure in the arm veins and thirdly, abdominal ascites. The ascites which is out of all proportion to other clinical findings is the sign which should lead us to suspect the diagnosis.

I might say that digitalis in these cases is contraindicated; since you usually have a rather rapid rhythm and if successful in slowing the heart with the drug the patient actually feels worse. This is due to hypo-diastole, by this we mean these constricted hearts are able to contract but there is not room for full diastole and when the rate is rapid the circulation is really better.

Also it might be brought out that for a long

while we felt that adhesions from the pericardium to adjacent structures such as the pleura and diaphragm played a part in producing the symptoms of this disease but we know now that such adhesions are rather innocent. It is the adhesions in the pericardium and even extending into the myocardium which cause trouble.

I certainly agree with Dr. Johnson that the diagnosis of constrictive pericarditis is hard to make clinically but with the help of Roentgen-Kymographic findings as have been described to you this evening we believe we have a pathognomic sign of this clinical entity.

**Misch Casper:** I am sorry that Dr. Griswold isn't here tonight. This is real pioneer work, and Dr. Griswold was one of the first surgeons to do this operation. This work of Dr. Johnson's is most educational and is to be highly commended.

It is my belief that those of us who attend three or four medical meetings a year find that we can also learn a great deal from our own Jefferson County Medical Society meetings, and the good attendance this evening indicates that many others share my belief.

I should like to apologize to Dr. Johnson and the X-ray men or the Roentgen Kymograph men, for I entirely overlooked this advancement in Roentgenology in my paper read last week before the meeting of X-ray technicians. I have always been interested in the progress of this field, as its forty years of growth have coincided with my own forty years of medical practice. We mentioned the one-cylinder Brush automobile. When I look at the automobile today, I realize its great progress, and the development in X-ray work has been corresponding to, or even greater than, the development of the automobile.

When we study the X-ray work the Roentgenologists are doing, we realize that indeed it is nothing short of magic.

**Gordon S. Butterff:** I was especially glad to hear Dr. Bell pay tribute to Dr. Johnson for his work in roentgen kymography. I was quite sure Dr. Johnson had done much of the original work in this field, but he is so modest that he would not let it be known. Dr. Bell has, therefore, paid him the tribute he so richly deserves.

I had the privilege of seeing one of these cases. It was a child at the Masonic Home, where Doctors Bruce, Hurst and myself have the pediatric service. This child came to the hospital for some other complaint, but Dr. Hurst, who was then on service, noticed a pericardial friction rub. Dr. Hurst tapped the pericardium, subsequently, and obtained considerable fluid. Later the child developed hydrothorax, and still later, rather definite ascites. From time to time, various forms of medication were tried, such as ammonium chloride, and salyrgan, etc.

Sometimes we thought he was better, but month by month he became steadily worse. He was bloated so that he looked nephrotic. His pericardium was tapped twice, and the thorax was aspirated several times. Subsequent X-rays showed the heart to be small, causing me to suspect constrictive pericarditis. I asked Dr. Griswold to see him. This he was kind enough to do, and after seeing the child and his X-rays, he concurred in the tentative diagnosis of constrictive pericarditis, and asked that we admit the child to the City Hospital for further study. This was done, and after a further work-up, including a roentgen kymogram, which you have seen tonight, he was scheduled for operation. Dr. Bruce and I witnessed the operation. It seemed to us that the operation was proceeding nicely and that the child had withstood the technical part well, but as the surgeons were about to close, the heart ceased beating, and all forms of stimulation, including massage, were of no avail.

In all fairness, I think it should be stated that this child was headed for a fatal termination, and even though we realized that this type of operation offered a great risk, we felt that under the circumstances the hope justified the risk.

**J. G. Sherrill:** Is there a history of acute pericarditis in any of your cases?

**R. N. Holbrook:** Of what value is fluoroscopic observation of the heart as compared with kymographic examination?

**Sydney E. Johnson,** (in closing) Answering Dr. Sherrill's question: two of the patients gave a history of previous attacks of acute pericarditis, with effusion. Both of these were tuberculous.

Regarding the value of the fluoroscopic examination, it is unquestionably of considerable importance, but would seldom warrant a positive, or anatomically explicit, diagnosis.

**Localization of Foreign Bodies by Double X-Ray Exposure.**—Shiga says that foreign bodies of hard substances deep within the body can be localized exactly by his method of simultaneous double x-ray exposure. The theoretical foundation of this method is almost like that of the shifting methods of exposure devised by other investigators; however, the author adds further theoretical development and geometrical explanations. The error of experimental observation totals 0.95 per cent and amounts to only 1 or 2 mm. of the true length of the object. This method of double exposure by means of parallel x-ray tubes can be used not only for the localization of foreign bodies but also in the diagnosis of digestive, urogenital and orthopedic disorders. Furthermore, it can be used for industrial purposes, such as for the inspection of cast-metal work.



EARLY DIAGNOSIS AND TREATMENT  
IN NEUROSYPHILIS

J. H. ROMPF, M. D.

Lexington

The importance of neurosyphilis as a medical, social and economic problem cannot be too highly emphasized. According to the figures of the Bureau of Census, during the year of 1938, a total of 8.5 per cent of first admissions to various hospitals for mental disease throughout the country, were caused by neurosyphilis. Here in Kentucky, at Eastern State Hospital, the records for the year 1939 show that 13 per cent of first admissions were diagnosed as neurosyphilis. Furthermore, it has been estimated that 65 per cent of the organic neurological material in the wards of Cook County Hospital, Chicago, and approximately 10 per cent of that in private practice, was neurosyphilis. Records from the Mayo clinic show that syphilis as a whole affects 4 per cent of the patients, and various surveys have shown that 65 to 78 per cent of the syphilis seen at this institution, has a neurosyphilitic aspect. Despite this relatively high incidence of the disease, early diagnosis is made in only a relatively small percentage of cases.

Throughout the various fields of medicine, early diagnosis is of paramount importance. In acute surgical conditions, the failure of the physician to make a correct diagnosis early in the course of the disease may cost the life of the patient. Early diagnosis is of equal importance in the field of internal medicine, not only in acute conditions, but also in chronic ones, where prompt institution of the proper regime of treatment may add years to the life expectancy of the patient. Likewise, in the field of psychiatry, there is no condition where early diagnosis is so important as in neurosyphilis. The efficacy of treatment in these cases bears a direct relationship to the length of time that central nervous system involvement has existed. Today therapeutic results are being obtained, which were not dreamed possible a few years ago, but still too many cases of neurosyphilis are not diagnosed until such marked mental deterioration and advanced neurological changes have occurred that very little response is obtained from the treatment.

The means of achieving early diagnosis of neurosyphilis include these procedures used in other fields of medicine, that is, a good history, thorough physical, neurological and mental examinations, and adequate laboratory procedures. We must be very careful not to neglect any of these procedures as all are equally important.

In taking histories, we are often handicapped through failure of the patient to admit previous luetic infections. However, we as physicians are also often negligent in this respect, through exclusion of syphilis as a possible diagnosis merely because of patient's social and economic status. Also, the fact must be considered that lay persons in general often have very little knowledge concerning syphilis. We often find persons who otherwise are fairly well educated, who do not know the difference between syphilis and gonorrhea. For this reason in taking a good syphilis history, we must carefully question the patient as to whether he has ever had any lesions of genitalia, mouth, or skin which might resemble luetic lesions. Also, in the case of women, questioning concerning outcome of pregnancies and condition of children during early life is often of value. It is surprising how many women who emphatically deny that they have ever had syphilis, and yet who have had repeated abortions, miscarriages or still births which are later proven to have been caused by syphilis. Finally, in taking a syphilis history, the patient should be carefully questioned concerning the taking of "shots," since occasionally there are persons who give a negative luetic history, but readily admit that sometime in the past they have taken a series of injections of a yellow medicine in their arm veins.

In considering the subjective symptoms of neurosyphilis, we must consider that this condition may give almost any symptom, and even very closely simulate many other medical and surgical entities. The most frequently found symptoms in neurosyphilis are: headaches, dizziness, ringing in the ears, lightning pains, paresthesias, diplopia, ptosis, failing vision, urinary symptoms, gastric symptoms, weakness, fainting spells, convulsions, ataxia, speech disorders, and mental or nervous symptoms. Time is too limited to take up each symptom or group in detail, but I would like to enlarge upon several important findings.

Frequently purely somatic complaints such as backache simulating sacro-iliac

strain, headache, gastro-intestinal or urinary symptoms prove to be evidence of neurosyphilis on complete examination, and quickly vanish upon the institution of treatment of the underlying condition. Disturbances of bladder control and of the sexual reflexes are frequently overlooked as early signs of lower spinal cord changes caused by neurosyphilis. In many cases, the first symptom is bedwetting at night caused by overflow of urine from a distended bladder through a contracted sphincter. In all cases of urinary retention neurosyphilis should be carefully ruled out as the etiological factor.

The symptoms of tabetic "gastric crises" are often mistaken for other medical and surgical conditions, and occasionally operation is performed because of lack of proper diagnosis through thorough neurological examination in these cases. These attacks may comprise pain without vomiting, vomiting without pain, or, as usually is the case, a combination of both pain and vomiting. The conditions with which "gastric crisis" is most often confused are gastric ulcer, cholecystitis, appendicitis, salpingitis, renal calculi, and postoperative adhesions. It is important to note that more emphasis should be placed upon physical signs and neurological findings in making the diagnosis of "gastric crisis" than upon the blood or spinal fluid serology, since both of these may be negative in occasional cases.

The onset of mental symptoms in neurosyphilis may be sudden, but more often is gradual and progressive. Those cases showing an acute onset may begin with a fainting spell, or a seizure either of epileptiform or apoplectiform nature. The epileptiform seizure may be of any degree of severity, but in general persists for a longer period of time than a typical epileptic convulsion, and also the patient does not always lose consciousness during the attack. The apoplectiform seizure may resemble a true cerebral accident, but the resulting hemiplegia often clears up within a few days. Frequently a head injury, emotional stress, or bodily and mental fatigue may usher in the condition, and unless diagnosis is made by spinal fluid examination at the time, the patient may show a temporary period of spontaneous improvement, and then later may have a more severe attack, which may terminate in death. In many cases of sudden onset, the symptoms are entirely mental, the patient suddenly becoming excited, euphoric, excessively talkative and expressing many

and varied delusions. Occasionally, the onset is with a sudden suicidal attempt in a person whose family has always considered him to be normal mentally.

In the majority of cases showing a gradual onset, the earlier symptoms may be memory defect, the memory becoming impaired especially for recent events. Frequently short periods of amnesia occur, of which the patient usually has little recollection. Various other early symptoms are fatiguability, irritability, emotional changes, insomnia, tremors, changes in habits, and early changes in reasoning power and judgment. As is the case in more advanced stages, the patient, when questioned, will emphatically deny that there is anything wrong with him, and frequently will state, "I feel fine."

The onset and gradual progression of symptoms in paresis is usually so insidious that the patient is not recognized by his family or friends to be mentally abnormal until later mental changes have occurred. These may include disorientation, clouding of consciousness, delusions, hallucinations, increased psychomotor activity, depression, marked memory defect, periods of rage and violence, marked impairment of reasoning power and judgment, and complete lack of insight. The delusions of grandeur, which are included in the typical text-book picture of paresis, are the exception rather than the rule. Frequently the only mental findings in a far advanced case of paresis is a marked degree of mental deterioration, the reactions and behavior of the patient being similar to those of a basically mentally deficient individual.

In evaluating the symptoms shown by any case, it must be kept in mind that the basic mental ability and the prepsychotic personality play a great part in determining the final findings. The person of schizoid type of personality, who develops paresis, is more likely to show a marked schizophrenic flavoring in the nature of his symptoms and mental findings. On the other hand, the cyclothymic type of individual who develops paresis is more likely to show either a marked depressive reaction or a heightened mood, with typical maniac characteristics. Also, it has been shown that there is a definite relationship between the prepsychotic personality and prognosis in each case, as a personality well integrated before the onset of paresis deteriorates more slowly, has less profound psychopathological states, and in



general responds better to treatment than the poorly adjusted personality.

Physical findings in neurosyphilis include loss of weight, muscle atrophy, and neurological findings of pupillary changes, dysarthria, poor coordination, decreased motor tone, sensory changes, and reflex changes. In very early cases the consensual light reflex is usually lost, and later the pupils begin to show inequality, irregularity, and sluggishness of reflex to light. In more advanced cases, the pupils become Argyll-Robertson in type, and there is then little difficulty in making the diagnosis. The pupillary changes may be accompanied by diminished vision due to optic nerve involvement, or ptosis, diplopia, and strabismus due to the ocular muscle innervation being affected. The dysarthria of early paresis is a slurring of words, and is usually accompanied by relaxation of the nasolabial folds. The sensory changes occurring in neurosyphilis may include loss of sensation to pain, touch and temperature, but usually the proprioceptive sense is affected due to involvement of the posterior columns. In such cases the patient's gait becomes affected, and he may show any degree of ataxia from a slight tendency to come down hard upon his heels and to separate his feet in walking, to an almost complete paraplegia.

The neurological reflex changes found in neurosyphilis may vary from normal to exaggeration, diminution, or absence. Usually, early, the knee jerks become hyperactive but in tabes they become diminished and often finally absent.

According to the location and the extent of involvement of the central nervous system by the syphilitic infection, various other neurological findings occur occasionally such as positive Babinski, Gordon or Oppenheim tests, ankle or patellar clonus, and loss of abdominal or cremasteric reflexes. The neurological findings in neurosyphilis by no means remain constant, and are frequently transient and fleeting, such as following seizures either of the epileptiform or apoplectiform type. In general the neurological findings tend to show a gradual progression, unless the patient responds well to treatment, in which case they often become arrested.

A thorough mental examination is of utmost importance in making an early diagnosis of syphilis of the central nervous system. This examination should include description of general attitude and behavior of patient, stream of conversation, emotional state, mental trend, and mental

grasp and capacity. In order to properly describe the emotional state inquiry should be made concerning depression, suicidal ideas or attempts, and hate reactions. The description of mental trend or content of thought should include statement concerning delusions, hallucinations, compulsions, phobias, and obsessions. Finally, the statement of mental grasp and capacity should describe the attention, perception and comprehension of patient, orientation, memory, general knowledge, intelligence, insight and judgment. The mental findings in neurosyphilis may vary from no abnormal findings to the most marked mental changes.

Laboratory procedures, while of great importance in other fields of medical science, are considered indispensable in syphilology. We have now arrived at the stage where routine blood serology examinations are considered to be a part of every complete medical examination. By this means thousands of cases of syphilis are diagnosed daily, which previously would have gone undiagnosed. However in one respect, we are still negligent, in that we do not always follow through and make a spinal fluid examination, in every case where blood serology is found to be positive, before patient is discharged from treatment, or earlier in those cases showing positive neurological findings, or symptoms of mental and nervous disease. Spinal puncture is a relatively simple procedure, and should be used far oftener. The fear which exists in the minds of lay persons toward spinal puncture, is due to a great extent to the attitude of many physicians in the past toward this procedure.

The laboratory examinations used in the examination of spinal fluid are the cell count, globulin tests, serological examination by Wassermann, Kahn or similar test, and finally, the colloidal gold reaction. The cell count and globulin tests give us an index of the degree of meningeal reaction, but the former test is considered by most authorities to be more reliable than the latter. The intensity of the Wassermann reaction of the spinal fluid gives us a guide to the degree of parenchymatous involvement, and it is essential that this test be quantitative. The colloidal gold reaction is significant mainly in considering prognosis of the case. It should be kept in mind that the final interpretation of the spinal fluid picture, when clinical signs are absent, should be made in terms of all four tests and the blood serology, and not any one of them.

Only the positive Wassermann test of the spinal fluid is diagnostic of neurosyphilis, but in a small percentage of cases this test may show negative findings even in the presence of syphilitic involvement of the central nervous system. A colloidal gold test of zone one or typical paretic type curve when associated with negative spinal fluid serology may occur in cases of epidemic encephalitis of multiple sclerosis.

I would like to call attention to some of the medical and neurological conditions from which neurosyphilis must be differentiated. These include cerebral arteriosclerosis, epilepsy, multiple sclerosis, cerebral hemorrhage, thrombosis or embolism, brain tumor, brain abscess, encephalitis, lead encephalopathy, diabetic syndrome, migraine, infectious cerebrospinal meningitis, tuberculous meningitis, pernicious anemia, pellagra, neurasthenia, dementia praecox, manic depressive psychosis, hysteria, and alcoholism.

In the case of each of these conditions a good history, followed by complete physical, neurological and mental examinations, and laboratory work including both blood and spinal fluid tests would aid greatly in the differential diagnosis. Since, in many cases of neurosyphilis, the first symptoms are neurasthenic in character, it is very important to make routine blood serology examinations in all cases showing psychoneurotic manifestations. Such cases are often dismissed without adequate examination with the admonition that, "you are suffering from a little nervousness," or by giving them some sedative medication. I know of a physician who was observed to have various psychoneurotic manifestations over a period of two years. About one year after onset of these symptoms one of his colleagues had a blood test run upon him, and when the report was returned positive, put him on antiluetic treatment, but failed to make a spinal fluid examination. When this man finally arrived at a mental institution, he showed far advanced symptoms of paresis, and failed to respond to treatment.

In considering treatment of neurosyphilis, we find that most authorities agree that fever therapy should be used, followed by a continuous series of tryparsamide and bismuth injections. The fever therapy may be given by malarial inoculation, or by means of artificial fever apparatus either of diathermy type or the short wave inductotherm. Malarial inoculation is effected by injecting five cubic centimeters of blood from a patient infected with tertian

malaria, either intramuscularly, or preferably intravenously, into the patient to be inoculated. At a period averaging from five to seven days later, he will react with a malarial paroxysm, and will continue to have similar reactions, either every other day, or daily in some cases where the malarial infection is mixed tertian. In some cases where the patient fails to react to tertian malarial inoculation because of immunity from previous infection, the quartan strain of malaria may be used often with success. The total number of malarial reactions which the patient is allowed to undergo is variable according to the height of temperature reached during each reaction and also the total number of fever hours, but usually averages about twelve paroxysms with a total of at least fifty fever hours. Some authorities prefer the use of artificial fever apparatus, claiming that the temperature may be better controlled. However, this objection to the use of malaria has been removed with the advent of use of thiobismal, which can be used to either stop completely or modify the severity of the malarial paroxysm without permanently terminating the infection. Contraindications to the use of fever therapy are cardiac disease, pulmonary disease, nephritis, anemia, malnutrition or any chronic infectious disease. It should be remembered that fever therapy gives less favorable results in the treatment of tabes dorsalis than in any other form of neurosyphilis.

There is some difference of opinion among various authorities as to whether tryparsamide and bismuth injections should be given concurrently or in alternating courses, but it is now almost universally agreed that whatever treatment given should be continuous. Tryparsamide should not be given until after a careful ophthalmoscopic examination has been made, and if possible further eye examination, including visual acuity and perimetric field-tests. The first dose of the drug should consist of one gram given intravenously and then three gram doses may be given weekly, except in the case of aged individuals where it is advisable to continue with one and one-half gram doses. One method of giving both tryparsamide and bismuth concurrently is to give one injection of each weekly for the first sixteen weeks. Then the tryparsamide is discontinued for four weeks while bismuth is continued. Then both tryparsamide and bismuth are given in courses of twelve weeks each, followed by four weeks rest in



such manner that one or the other drug is being used at all times. This is known as the "shuttle system," and allows four weeks rest out of each sixteen from each of the drugs, thus diminishing the possibility of toxic symptoms and yet affording continuous treatment. Urinalysis should be made at intervals of from every four to six weeks in order that any kidney damage may be detected early. In the event that symptoms of arsenical poisoning or optic atrophy occur, the tryparsamide injections are discontinued for a period of four to six weeks, or even longer, according to the individual case, and then treatment is resumed with caution. Bismuth is similarly discontinued temporarily whenever symptoms of bismuth poisoning appear.

At yearly intervals during the course of treatment both blood and spinal fluid check-ups should be made. By means of the colloidal gold curve and the quantitative Wassermann reactions, the serological response to treatment may be observed. Treatment should be continued until the spinal fluid serology is negative in all dilutions. In the event that the spinal fluid serology changes before that of the blood, the arsenical treatment may be switched from tryparsamide to Neosalvarsan or Mapharsen. It is advisable that all cases showing a complete serological cure should receive a complete checkup, including both blood and spinal fluid examinations, at yearly intervals in order that those cases showing a relapse may be detected early and treatment resumed.

In closing I would like again to emphasize the importance of routine blood serology examinations throughout the various fields of medicine. Spinal fluid examination should be made in all cases where the blood serology is positive, and even when it is negative in cases having a definite luetic history, positive neurological findings, or significant mental symptoms. It is only by means of early diagnosis that we can obtain the best results in treatment of neurosyphilis.

#### DISCUSSION

**Arthur Kasey, Lakeland:** Mr. President and Fellow-Members of the Kentucky State Medical Association: In this very excellent paper Dr. Rompf has presented to us in detailed manner the entire subject of neurosyphilis. I don't know how he did this in such a short period, but he has accomplished it.

In his last paragraph he has given us the essence of the whole paper, and I do not care to add to his talk, but only to emphasize the statements given in the last paragraph. In the first

sentence of the last paragraph he stated that it was very important for routine blood examinations to be made by the medical profession. This is the first step in the early diagnosis of neurosyphilis and especially the treatment of it, if prophylaxis can be called treatment. Only by obliterating syphilis can we expect to get rid of neurosyphilis.

Dr. Houston Merritt of Boston states that if syphilis were treated properly, promptly and adequately neurosyphilis would be important only for historical reasons.

In the second sentence of this last paragraph Dr. Rompf tells us that spinal fluid examinations should be made whenever there is any evidence of syphilis, either by history, blood examinations, neurological or mental examinations. We realize the importance of this, and what we would like to know is when we should first make the spinal fluid examination. Some believe we should make it early, because only two weeks after a chancre we know that neurosyphilis can be discovered by examining the spinal fluid. However, this is important only from the progress of our treatment during the next year and a half or two years. Naturally, we would not give fever therapy or tryparsamide so early, but by finding the positive spinal fluid we realize that the prognosis of the disease is much worse and that we are going to have to intensify our treatment during the following two years. Others believe there is really no value in examining the fluid so early because they think by keeping up the routine and constant treatment with bismuth and neoarsphenamine, both the spinal fluid and the blood will clear up, and if not, then at the end of a year and a half or two years, tryparsamide or fever therapy should be given.

We understand that the first part of the central nervous system to be involved is the meninges and the spinal fluid will tell us that. Therefore spinal fluid examination is the most important method of determining the presence of neurosyphilis. If the spinal fluid is not positive, if meningeal neurosyphilis is not present by the end of the second year, we are not likely to find meningo-vascular syphilis or the parenchymatous involvement at a later date.

The treatment with fever and tryparsamide is the treatment of late syphilis. The early use of tryparsamide in meningeal neurosyphilis will usually prevent the parenchymatous or meningo-vascular syphilis from appearing, so is important.

Much stress has been laid upon the danger of optic atrophy from the use of tryparsamide. However, in Chicago at the Michael Reese Hospital and Chicago Public Health Centers they have found that out of around 155 patients who have neurosyphilis with visual disturbances, visual acuity has been helped by treatment with

tryparsamide in 60 cases and in only 20 has the visual acuity become worse.

Other interesting work has been done at the Central State Hospital in Indianapolis where they have been studying the occurrences of epileptic seizures in paretics. There they have found that neurosyphilitics who have not had epileptiform seizures often present at autopsy the same pathological involvement of identical cortical areas as neurosyphilitics who have had epileptiform seizures, thereby strengthening Dr. Rompf's idea that the symptoms of the neurosyphilitic may be due to an underlying personality disorder or another neurological condition rather than to the specific disease. For instance, the schizoid personality who has central nervous system syphilis will give evidence of being a dementia praecox, whereas he really has neurosyphilis, and it is very possible, then, that these epileptiform seizures that we see in the neurosyphilitics are present only because there is an underlying condition such as idiopathic epilepsy of which we know so little at present.

**J. G. Wilson, Lexington:** I have nothing at all to add to this paper, except one thing that may be of interest to society from the standpoint of prevention. Our mental hospital program conceives of prevention as important a part of our activities as the cure of the fully developed psychosis. With the passage of the Chandler-Wallis Act we had one provision providing for voluntary commitment. We have utilized that in this connection chiefly for admission to the hospital of cases with neurological symptoms of syphilis and perhaps some beginning mental changes, in the opinion of the physician who has him under his care. In many instances we have secured his admission to the hospital for fever therapy with the idea of preventing a full-blown paresis at a later date. This procedure has been utilized at some of our state hospitals a great deal, and it is being utilized at all of them in an ever-increasing manner. It is usually done by an appeal from the county health officer who has had these cases under his supervision, and of course is confined for the most part to those who are unable to pay.

I enjoyed Dr. Rompf's paper. I think that it covered the field very extensively and that if we knew everything that he said in that paper we would know all about neurosyphilis.

**J. H. Rompf, (in closing):** I would like to mention that the 13 per cent incidence of neurosyphilis in the Eastern State Hospital seems to be an increase over previous years, and also an increase over the average for the nation at large. However, this is due in great part to the splendid service given by our county health officers in diagnosing more of these cases. Even in the most outlying counties they are now diagnosing neurosyphilis and sending the patients into the

hospital for treatment, when we can do something for them, rather than waiting until they have so far deteriorated, that the case is hopeless.

In all the various fields of medicine there are improved diagnostic procedures being constantly developed. Most of them involve costly apparatus which cannot be used by the physician in the rural community. However, there are five simple neurological tests which can be used by any doctor, wherever he is located. These are the pupillary reactions, the Romberg test, observing the gait of the patient, observing his speech, the knee-jerks, and in general observing his mental status. If these tests were used constantly, I believe that we would have far more cases of neurosyphilis diagnosed early rather than late. In closing I would like to thank Dr. Kasey and Dr. Wilson for their splendid discussions. Thank you.

### TRAFFIC ELBOW

CHARLES F. WOOD, M. D.

Louisville

The increasing number of motor vehicles, and the high speeds at which they are driven, are causing an appalling number of accidents, many of them fatal, and many others resulting in severe multiple injuries. In spite of safety campaigns, stringent traffic regulations, and road patrols, accidents such as this one will undoubtedly continue to occur. From a practical standpoint they may be considered unavoidable, or at least we can assume that there is nothing we can do to prevent them, since they result from human incompetence, mechanical defection or both.

The purpose of this paper is to present a traumatic entity, crippling in its severity, only too frequent in its occurrence, and yet so easily avoidable that it should never happen. By stimulating more interest in this condition, and inciting as much discussion as possible about its easily prevented cause and its crippling consequences we hope in some small way at least to lessen its incidence.

This condition, known variously as traffic elbow, car-door arm, or side-swipe elbow, is caused by one very careless habit, namely, resting the arm on the window-frame of a car, allowing the elbow to protrude. With the elbow so exposed, it suffers a mangle injury if the car is side-swiped by a passing car or truck (as is usually the case) or if the car overturns or strikes a pole. Usually the actual acci-



dent is minor in that relatively little damage is done to either vehicle, other occupants are rarely hurt, and the injured person (almost always the driver) suffers no trauma except to the elbow. In other words, had he had his elbow inside the car, he would not have been hurt at all, and would not be confronted with the prospect of permanent disability, either from dysfunction or loss of the arm.

I do not know the exact incidence of occurrence of this accident, although I have seen four such cases in less than a year, and practically all surgeons with whom I have talked recall one or more cases they have seen. At the Louisville City Hospital, at least half a dozen cases are treated each year. As far as I can estimate, at least 50 per cent of the arms so injured require amputation, and the ones which are saved show greater or less degree of permanent deformity or dysfunction.

In all the cases I have seen or heard of the injury has been suffered by fairly young male adults, most of them working men, all of them using their hands to make a living. The only redeeming feature is that the injury typically is to the left elbow, as in almost every instance it is the driver of the car who is hurt.

The clinical picture presented by these cases is rather variable, but basically the injury can be classified as some form of compound fracture or dislocation in the region of the elbow. The fractures are always comminuted, usually involving the olecranon, head of the radius, and humeral condyles. Frequently they are multiple, involving the distal half of the shaft of the humerus and the shafts of the ulna and radius as well as the articular portions of these bones. The compounding, which is always present, is, too, always severe. There is extensive tearing and maceration of the skin and muscles, often amounting to almost complete avulsion of the part. Bleeding, naturally, is profuse, and major vessels may be so damaged that the blood supply to the part distal to the injury is obliterated. The ulnar nerve, especially, is liable to injury, but any or all of the three main nerves to the forearm and hand may be severed.

The treatment of this condition must of necessity vary with the individual case. Without going into technical detail, I think it would be well to mention a few of the important factors to be considered in handling these injuries in the order in which we must deal with them.

(1) Combat shock: In addition to the

usual general measures of adequate sedation, application of external heat, and administration of intravenous fluids, including blood, there is one point which should be emphasized—if dressings have been applied, and if the arm has been splinted, it should not be disturbed for curious inspection or X-ray examination until the patient has been anesthetized for whatever operative procedure is found necessary. Profuse hemorrhage can be controlled by a tourniquet or digital compression of the arteries proximal to the injury.

(2) In the actual treatment of the injury, the first and most important decision which must be made is whether or not the arm should be amputated. Before the patient is anesthetized, it is well to tell him or his family that he may lose the arm, and we should be prepared to amputate if necessary, but amputation should be performed only for one of the following reasons:

(a) Lack of adequate blood supply to the part distal to the injury.

(b) Soft tissue damage so severe and extensive that adequate debridement is impossible, and an overwhelming infection seems inevitable.

The complicated nature of the fractures themselves does not constitute an indication for amputation, for, if the blood supply to the hand is intact, and overwhelming infection can be prevented, practically any extremity which can be saved is much better than a prosthesis.

(3) If primary amputation is not performed, our efforts are directed towards preserving as good a member as possible. Bleeding must be stopped, devitalized tissue removed, and infection combatted by prophylactic sera, sulfanilamide, and similar products, and X-ray therapy. The actual reduction and fixation of the fractures may be done by whatever method the individual surgeon deems best for the particular case at hand. It must be remembered that some degree of ankylosis of the elbow is almost bound to result, so the part should be immobilized in the optimum position for function.

(4) Immobilization should be continued for a sufficient length of time to allow complete healing of all injured parts. After complete healing has occurred (which requires from two to six months) active exercise and physiotherapy are instituted in an attempt to improve function of the part as much as possible. Reconstructive operative procedures should be deferred as long as possible until there is no further im-

provement shown with conservative treatment, and until all danger of flare-up of infection is passed.

In closing, I wish to thank Drs. Irvin Abell and H. H. Hagan, with whom I saw and treated two of these cases for allowing me to include them in this report.

#### DISCUSSION

**Irvin Abell:** I can add but little to the discussion. The most important point is the preventive feature. I do not know what to suggest, but if such films as the last two shown could be brought to the attention of laymen, it is possible that the impression made upon them might be helpful in avoiding such injuries.

I do not recall the exact number, but we have seen about six cases in which amputations were necessary. As in one of the instances reported by Dr. Wood, it is not always possible to know the full extent of the injury from the X-ray film: the injury to muscle and blood vessels more often determines amputation than the breaks in the bones. The aggregate number of "traffic elbows" observed in the hospitals of Louisville each year would doubtless make an impressive group of preventable deformities and mutilations occurring at an age and economic level in which the loss of an arm represents a major disaster.

**R. A. Griswold:** We see a great many of these cases at the City Hospital. Our experience has been as Dr. Wood mentioned, that we lose about half of the arms and of the patients whose arms we save about half have stiff elbows. This is a very prevalent habit of driving with the arm out of the car, and I know that many of the men in this room have the habit.

As Dr. Abell brought out, this is a Public Health, rather than a Surgical problem, and is a subject which should be given wide publicity. It is a summer accident occurring when the windows of the car are open and we are seeing increasing numbers, with changes in automobile designs. In the past, most of these fractures have been sideswipe collisions between a car and a truck moving in opposite directions. The overhanging of the average farm or transport truck body is just the right height to come in a car window. Occasionally, an arm may be badly damaged without contact between the vehicles, and often the truck driver does not know that he has hit anything. With the newer automobiles which have wider bodies and no running boards, the protruding elbows are more exposed and we may expect in the future to see more of these accidents by sideswipe between two automobiles, rather than between an automobile and a truck.

**W. McDaniel Ewing:** I enjoyed Dr. Wood's paper very much.

Regarding treatment, I would not consider the

absence of a radial pulse or even more extensive absence of blood supply as an indication for immediate amputation. Improvement in circulation always follows conservative methods of suspension and traction. This may easily be accomplished by lateral traction over the side of the bed and an overhead pulley to suspend the forearm in an upright position. Furthermore, the fragments, which are practically a "bag of bones" in this type of fracture may be gently manipulated and the removal of any pressure on the blood vessels will be maintained by this form of balanced traction.

Amputation may be necessary because of extensive infection, or almost complete maceration of the soft tissues. But as a life saving measure, this is seldom necessary. An artificial upper extremity is a poor appliance at best. Any kind of a hand offers a better solution, particularly to persons in this age group.

By applying balanced traction, the elbow wounds may be inspected and appropriate treatment including continuous fomentations instituted.

**C. M. Bernhard:** If we are going to have a publicity campaign on this fracture I think it should also apply to the right arm. When I was in Lexington I saw a dentist who was riding with a driver and this car sideswiped another automobile and the dentist received a traffic elbow. If we are to have publicity, it should be applied to the right arm also.

**Gracie R. Rowntree:** The idea of starting a publicity program for the prevention of traffic accidents is an excellent one. A few weeks ago, after seeing some publicity on the subject of traffic elbow, my wife and I counted a hundred consecutive cars one Sunday afternoon and of this hundred, seventy drivers had their elbows out of the window. There seems to be good reason for the large number of traffic elbows in summer.

**R. O. Joplin:** I want to ask Dr. Wood if there has been a recent check-up in the height of present day cars and trucks, to see if the overhanging part of the truck is higher than the car window, for I have seen fewer of these cases in recent years. All that I have seen, three or four, happened out in the country and all were injured by trucks with overhanging bodies. The treatment was very simple as there was nothing to do but to amputate the arm.

**Charles F. Wood,** (in closing): I want to thank all of you for discussing my paper.

In answer to Dr. Troutman's personal question, I have never heard of this accident happening to a one-armed driver! In regard to Dr. Ewing's statement about trying to save the arm, I certainly agree with what he says. If there is any possibility of saving the arm, that



arm should be saved. We are much more hesitant to amputate an arm than a leg because the arm is much more useful in a man's work. Treatment by traction I know is a very good treatment. I have used it myself in some cases. In these I have shown, the Caldwell cast was much more effective. Any type of treatment the surgeon thinks will bring about the best result for a particular case is the type that should be used.

The case which affected a right arm happened to a medical student between his junior and senior years. He got an excellent result, was treated by Dr. Owen and now has a very useful arm.

Dr. Joplin mentioned arm signals. All of these accidents have occurred on country roads and not at stop lights or intersections.

### INTUSSUSCEPTION OF A MECKEL'S DIVERTICULUM

M. CASPER, M. D.

Louisville

Meckel's diverticulum was an interesting and known entity more than a hundred years ago, when it was well described by Meckel, though it was known for at least a hundred years before that. Meckel, whose name it bears, was the first to offer a theory as to its origin as being the persistence of the intra-abdominal portion of the omphalomesenteric duct. He, too, called our attention to its importance and pathology in serious abdominal conditions. This congenital remnant occurs in about 2 per cent of all individuals. It is difficult to explain why it occurs three time more often in the male than in the female. It is seldom found on the mesenteric side of the bowel, but opposite the mesenteric attachment. It usually occurs in the last eighteen inches of the ileum, and may be a few inches from the ileocecal valve or, rarely, several feet from this point. The pouch varies in length and diameter. The distal end may be even larger than the attached end. It may have a mesentery, as the appendix, which it resembles very closely in histology; that is, the coats are about the same as the intestines, sometimes one coat being missing. The mesentery may be only a remnant and appear as a long band, which may be attached to any part of the abdominal structures. This band may cause obstruction by intestines' wrapping around it or herniating under it. Sometimes, the mucosa may resemble more nearly gastric mucosa than intestinal, especially in a

Meckel's high up in the proximal small bowel. The structure of this diverticulum being similar to that of the alimentary canal, naturally we may expect its pathology to be similar, and so we do have inflammatory disease, which very often simulates acute appendicitis, from which it is sometimes impossible to distinguish before operation.

Tumors, benign and malignant, may occur in the diverticulum as well as cysts, fecal concretions, and ulcers. Such ulcers may perforate, causing fatal peritonitis.

We also have obstruction other than that mentioned above, and finally intussusception, which usually occurs by inversion of the diverticulum.

Diagnosis of Meckel's diverticulum is not easy, and as it is often discovered when the abdomen is opened for acute abdomen, the operator should always keep it in mind as one of some thirteen or more causes of acute abdomen. Meckel's diverticulum may be discovered occasionally by X-ray examination. It is important to make special investigation, however, and give barium meal in small amounts at intervals under fluoroscopic scrutiny. The location of the pain is seldom of value, though pain near the middle line or on the left side should make us more suspicious. In diagnosis of acute abdomen a rectal examination should always be made.

Diverticulum occurs often enough that it should be looked for by inspection of the small bowel at operation. This is especially imperative in operations for acute appendix, and when the appendix is found not to be sufficiently diseased to account for all the symptoms.

The treatment of Meckel's diverticulum is resection. If the proximal attachment is not too large, it can be inverted very much like an appendix. If large, it can be resected, and the opening closed like any other opening in the small intestine. Any complication or attendant pathology is to be taken care of according to indication.

Report of case: L. R. S., boy aged 13, came to the hospital with abdominal pain of twelve hours' duration. His mother gave a history of his having had a milder attack about a year before. His abdomen was mildly distended and rigid with indistinct mass. By rectal examination a mass was distinctly felt, could be outlined, and was movable, suggestive of an intussusception or volvulus. The oft-looked-for pathognomonic symptom of intussusception, namely, bloody mucus, was not present in this case. The white blood count was

15,600 with 84 per cent polys. Immediate operation was advised and performed. Though the appendix appeared subacutely inflamed, it was not enough so to account for the symptoms. Further exploration revealed a mass in the pelvis, which we had previously palpated. The mass was displaced back up into the general abdomen. The diverticulum had a large concretion in it, herniated with the intussusception into the small bowel, there being some eighteen inches of small bowel constituting the intussusception. The intussusception was released, after some difficulty, and the diverticulum resected and base closed by Connell stitch.

## THE TREATMENT OF CARRIERS OF THE TYPHOID PARATYPHOID GROUP

MAX L. GARON, M. D.

Louisville

The problem of carriers of the typhoid group of organisms has always been difficult. Carriers are usually found during routine examination of the stools of food handlers. The cost of finding a carrier has been estimated by certain public health officials to be above \$50,000. In spite of this, very little in a practical way has been done to help these people. Their management has generally followed either a conservative or a radical pattern. The conservative method (compulsory in this State) consists merely of accurate supervision so that the carriers' employment must not be in that group classified as food handlers. The patients making up this group, of course, are still carriers. It has been repeatedly demonstrated that typhoid bacilli are excreted by the liver and eventually can be recovered from the bile as it enters the intestinal tract. The gall bladder apparently may act as a reservoir without itself becoming infected. This has led to the second or radical procedure in managing carriers—cholecystectomy.

In 1931, several Japanese workers (1) in Berlin published reports of the use of soluble iodophthalein in eradicating infections of this nature. Their results were only partially satisfactory. They injected the drug intravenously once and in several patients a second time. The percentage of cures after a month was less than 50.

Recently, Saphir and Howell (2) became

interested in this phenomenon and reported a case of a carrier of *B. paratyphosus* A. This patient had repeated positive cultures of this organism from the stools. Gram negative bacilli were recovered from duodenal material but would not grow on Endo's medium. Following the administration of dye used in the visualization of the gall-bladder, the stools became negative and remained so during the subsequent seven months.

Having had the opportunity of seeing a carrier of *B. dysenteriae* Flexner, a similar method of therapy was employed. The report follows:

### CASE REPORT

A. J. age 31, consulted me on July 2, 1940. He had been employed in a dairy until several weeks ago when he had to leave his employment because of the presence in his stool on several occasions of *Bacillus dysenteriae* Flexner. He was entirely symptoms-free and routine examinations failed to reveal any findings of note. He stated that four years previously he had had an incident of diarrhea and fever which lasted for several days but subsided with no apparent sequelae.

He was unwilling to undergo the expense of further investigation and therefore no attempts were made to recover the organism from duodenal drainage, or to investigate any immunological serum reactions. He was given 4 Gms. of Iodeikon (Soluble Iodophthalein-Mallinckrodt) dissolved in 30 cc. of distilled water. This was mixed in 120 cc. of grape juice and taken orally at bedtime. Two days later his culture was still positive. Two more treatments were given in a ten-day period. Part of the second dose was vomited. Three subsequent stools covering a six-week period have remained negative and he was allowed to return to his work.

### COMMENT

In experiments in vitro by Saphir and Howell they concluded that the dye was "for the most part bactericidal and only slightly bacteriostatic." Sulfanilamide has failed to eradicate organisms from the stool and vaccines have proven worthless.

It is hoped that more opportunities for the trial of this method will present themselves.

If proven successful, this method will add an important conservative approach to the management of this problem.

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# Kentucky Medical Journal

Published Monthly By  
THE KENTUCKY MEDICAL ASSOCIATION  
Incorporated

Entered as second class matter October 22, 1906, at the Postoffice at Bowling Green, Ky., under act of Congress, March 8, 1879.

Subscription Price .....\$5.00  
Edited Under Supervision of the Council

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NEXT MEETING LOUISVILLE

## COUNTY SOCIETY REPORTS

**Calloway:** The Calloway County Medical Society met Thursday, December 19, 1940, at the National Hotel at 8 P. M. in Murray. A dinner was served in the Club Dining Room. After dinner in the absence of Robert Mason, the President, A. D. Butterworth, Vice-President, served as chairman of the meeting and called it to order. E. L. Garrett showed a picture on the Care and Feeding of Infants, with special stress given on the pre-mature infants. After a round table discussion of the picture shown by Dr. Garrett, the chairman asked J. A. Outland and E. L. Garrett to discuss their ideas on the election of officers for the Society for the year 1941. After they had given their opinion on the subject, Doctor Fisher made a motion that we elect the 1941 officers at this meeting. This motion was seconded by Ora K. Mason and the vote was called and carried. Chairman called for nomination for President. Hal Houston nominated W. H. Mason; this motion was seconded by Dr. Jones, after no other nominations. J. A. Outland made a motion that the nomination be closed and that they elect Dr. Mason by acclamation. This motion was seconded by Dr. Fisher and Dr. Mason was elected President. He took over the chairmanship of the meeting and called for nominations for Vice-President. A. D. Butterworth nominated C. H. Jones for this office, the nomination was seconded by C. J. McDevitt and E. L. Garrett made a move that nomination be closed and that he be elected by acclamation. Catherine Fisher seconded the motion, it carried and C. H. Jones was elected Vice-President. W. H. Mason called for nominations for Secretary-Treasurer. Dr. McDevitt nominated J. A. Outland, C. H. Jones seconded the motion. The motion was made by A. D. Butterworth that he be elected by acclamation which was seconded by Dr. Mason and carried. He was elected Secretary and Treasurer.

Dr. Fisher made a motion that a fee of \$2.00 be collected from each member for County Society expenses. It was seconded by Dr. Ora Mason, voted on and carried.

Catherine Fisher made a motion that we have regular meetings every two months, the first Thursday in the month beginning the first Thursday in February, 1941, P. M.; motion was seconded by Hal Houston, voted on and carried.

A motion was made by C. H. Jones that we adjourn and seconded by all members present.

The following members were present at the meeting: Ora K. Mason, Will Mason, C. H. Jones, C. J. McDevitt, J. A. Outland, Hal E. Houston, E. L. Garrett, E. D. Fisher, Catherine Fisher, and A. D. Butterworth.

Members paying their dues were: Ora K. Mason, Hal Houston, C. H. McDevitt, C. H. Jones, A. D. Butterworth, W. H. Mason, J. A. Outland, Hugh L. Houston, I. V. Starks, E. W.

Miller, R. M. Mason, Prince A. Hart, L. D. Hale, E. D. Fisher, Catherine Fisher and E. L. Garrett.  
J. A. OUTLAND, Secretary.

**Daviess:** The Daviess County Medical Society, at its regular meeting January, 1941, elected the following officers: President, E. Dargan Smith; Vice-President, W. B. Negley; Secretary-Treasurer, Thomas E. Milton; Delegates, W. L. Tyler, W. H. Parker; Alternate Delegate, A. L. Kincheloe. Board of Censors: I. J. Hoover, J. D. Stewart, R. W. Conner.

THOMAS H. MILTON, Secretary.

**Bracken-Pendleton:** The November meeting of the Bracken-Pendleton Medical Society was held in August, in connection with a Health Clinic sponsored by the Parent-Teachers Association of that city. The meeting was well attended and a number of children were examined in the clinic, by P. F. Barbour of Louisville, who addressed the meeting at the morning session, on the subject, Crippled Hearts in Children. R. G. Elliott, of Lexington, spoke on injuries to new born babies at time of labor. Oma Creech, Assistant Director, Division of Maternal and Child Health, of Louisville, showed screen pictures of Puerperal Eclampsia. Those present felt that this was an especially interesting and instructive meeting.

The regular December meeting was held in Falmouth on the 26th of the month. C. N. Heisel of Covington was the principal speaker, his subject was Glaucoma.

Officers of the year 1941 were elected as follows: President, C. F. Haley, Brooksville, Kentucky; Vice-President, J. M. Blades, Butler, Kentucky; Secretary and Treasurer, W. A. McKenney, Falmouth, Kentucky.

W. S. McKENNEY, Secretary.

**Franklin:** The last regular meeting for 1940 of the Franklin County Medical Society was held December 12, 1940, at the Capitol Hotel, in Frankfort.

Following the regular business meeting, the election of officers for 1941 was held. Grace Synder, our Secretary for the past several years, was elected President. L. L. Cull, elected Vice-President, and T. P. Leonard, Secretary and Treasurer.

After the election of officers, L. E. Smith, Executive Secretary, Kentucky Tuberculosis Association, presented three interesting movies.

T. P. LEONARD, Secretary.

**Garrard:** The Garrard County Medical Society had a fellowship meeting in the office of J. E. Edwards on December 20, 1940, all members were present. All were found to be in fellowship with his professional brother. We had

a fine social meeting and discussed many problems for the good of the doctor and the community.

Miss Edwina Edwards, daughter of Dr. and Mrs. J. E. Edwards, was married to Mr. Thomas C. Johnson, in October.

Miss Maymie E. Hart, daughter of Dr. and Mrs. J. L. Hart, of Bryantsville, was married to Rev. Robert A. Pfrangle, recently.

Miss Martha Lou Montgomery, the very attractive daughter of Dr. and Mrs. B. B. Montgomery, who is an honor student at Transylvania College was elected Miss Transylvania by the student body of that school at Transylvania Day exercises.

Virgil G. Kinnaird, Jr., son of Dr. and Mrs. Virgil G. Kinnaird, will enter the Army Flying Corps in February, 1941.

J. E. EDWARDS, Secretary.

**Harrison:** The Harrison County Medical Society closed a very successful year at the December meeting held at The Harrison Hotel on December 2, 1940.

The following visitors and members attended the dinner-meeting: John W. Scott, John Harvey, Sam Marks, William Pennington, Thornton Scott, Arthur Barrett, Lexington, Ky.; B. F. Reynolds and T. P. Scott, Carlisle, Ky.; O. W. Brown and J. W. Blades, Butler, Ky.; J. A. Orr, E. L. Blake and J. C. Hart, Paris, Ky.; Councilor Arthur Bach, Newport, Ky.; Dr. Goodloe of the State Board of Health, Louisville, Ky.; H. C. Blount, M. J. McNeely, H. Midden, J. M. Rees, C. L. Swinford, J. P. Wyles, R. L. Loftin, K. W. Brumback, R. T. McMurtry, W. B. Moore, H. Tod Smiser, L. N. Dodd, H. H. Moody.

President McMurtry called the Society to order and proceeded with the election of officers for 1941, which resulted as follows: President, N. J. McNeely; Vice-President, R. L. Loftin; Secretary-Treasurer, W. B. Moore; Censor for 1941, J. P. Wyles.

Some interesting talks were made by Drs. Scott, Goodloe, Bach, Orr and Sam Marks.

The meeting was a thoroughly enjoyable occasion and the social feature was outstanding.

W. B. MOORE, Secretary.

**Johnson:** The Johnson County Medical Society met on Friday, December 20, at 1:00 P. M., instead of our regular meeting time, Monday, the 23rd. At this meeting Walter E. Vest of Huntington, W. Va., gave a talk on Gastro-Intestinal Diagnosis. Also, Boyd Brown of Huntington gave a talk on Modern Anesthesia. Both those talks were enjoyed by all present, they were both very instructive. The meeting was held in the new quarters of the Johnson County Health Department which is located in the New



City Hall, in Paintsville. Doctors present were: Paul B. Hall, Lon C. Hall, J. H. Holbrook, President W. E. Akin, Jr., J. A. Walls, W. R. Castle, Grant Rice of Oil Springs; James Archer, Ed Kissel, A. D. Slone, Secretary and visitors: W. E. Vest, and Boyd Brown of Huntington, W. Va.

It is our plan for as near as 100 per cent State membership as possible attend regular meetings throughout the coming year. We meet on the fourth Monday of each month at 7:00 P. M. and any doctor is invited to visit us if they are in Paintsville. Next meeting will be held January 27, 1941 at which time there will be election of officers and all members are urged to be present.

A. D. SLONE, Secretary.

**Johnson:** The Johnson County Medical Society met Monday night, January 6th for a special call meeting to take the place of the regular meeting set for January 27th. During the meeting the new state premarital law, which went into effect January 1st, was discussed. It was the opinion of the Society that the fee should be \$3.00 for each examination and \$2.00 for the blood test. That these should be run as far as possible by the local laboratories. If there are any who are absolutely indigent then these examinations and blood tests should be given by the Johnson County Health Department upon recommendation of any regular physician in good standing in the county. The Society felt that \$10.00 per couple for the complete examination, blood test and the certificate should be a fair price.

At this meeting a report of the year's work was given which was as follows: Regular meetings held 6, with average attendance 10; special meetings held 2, with total attendance 63; old members 11; new members 4; membership loss 2; present membership 13; active physicians in the county 16; State members 13.

Our Society was host to the Eastern State Medical Society and had 83 doctors present. The program consisted of such men as Irvin Abell, Louisville; W. W. Nicholson, Louisville; Ray M. Bobbitt, Huntington W. Va.; E. J. Humphreys, Huntington, W. Va.; A. T. McCormack, Louisville; J. M. Emmett, Clifton Forge, Virginia.

In May we had a meeting for the Dentists and Nurses of this county and for this meeting we had: Philip Barbour, Louisville; W. T. Maxson, Lexington; A. J. Alexander, Lexington; G. A. Nevitt, Lexington.

During the regular meetings we have had such men as: Walter E. Vest, Huntington, W. Va.; Boyd Brown, Huntington, W. Va.; Rudy Vogt, Louisville.

This has really been a good year in our So-

ciety, we have all enjoyed it and have really gotten something out of it that cannot be bought with money. We are looking forward to a better record this coming year as this is the first year that Johnson County has had a Society for many years past.

The officers for 1941 were elected at this meeting. They are: J. A. Wells, President; W. E. Akin, Vice-President; A. D. Slone, Secretary-Treasurer of Paintsville. Our next meeting is scheduled for February 24, at 7 P. M.

A. D. SLONE, Secretary.

**Madison:** The annual meeting was held at the Student-Union Building on the Eastern State Teachers' College Campus at Richmond on Thursday, December 19th at 6:30 P. M. This was a joint meeting of the Medical Society and the Woman's Auxiliary. The guest speaker was Oscar O. Miller of Louisville, who spoke on Tuberculosis. P. E. Blackerby, Assistant State Health Commissioner, was present. The meeting was attended by 19 members of the Medical Society and 13 members of the Auxiliary with 13 visitors. The election of officers for 1941 was as follows: President, Wilson F. Dodd, Berea; Vice-President, Harvey C. Blanton, Richmond; Secretary and Treasurer, Robert L. Rice, Richmond.

CHAS. B. BILLINGTON, Secretary.

**Whitley:** The Whitley County Medical Society, after due notice, held its annual meeting and elected officers at the office of L. L. Terrell, Corbin, on Thursday, December 5, 1940, at 1:00 P. M.

The following officers were elected: President, H. W. Terrell, Corbin; vice-president, Raymond Ohler, Corbin; secretary-treasurer C. A. Moss, Williamsburg; delegate, L. L. Terrell, Corbin; alternate, W. M. Brown, Corbin; board of censors, E. H. West, Williamsburg; Keith Smith, Corbin; and L. S. Siler, Corbin.

Being no further business, the meeting was adjourned.

C. A. MOSS, Secretary.

## NEWS ITEMS

Dr. Albert Butt died at the age of 82 in Louisville. He had retired from practice many years ago but continued to keep his interest in his county and state association.

Dr. W. W. Hord, one of Maysville's pioneer physicians, died at the age of 78 years.

The Association of Surgeons of the Southern Railway System, will hold their annual convention in the Brown Hotel, Louisville, May 25-27.

The Southeastern Surgical Congress will this year meet at the John Marshall Hotel, Richmond, Virginia, March 10-12 inclusive. It is interesting to note that Kentucky has given to this Congress two presidents—Irvin Abell, Louisville, and Fred W. Rankin, Lexington. Information regarding the meeting and program may be obtained by writing Dr. B. T. Beasley, Secretary-Treasurer, 701 Hurt Building, Atlanta, Georgia.

John W. Fish, M. D., and Samuel E. Parks, M. D., announce their association in the practice of Ophthalmology and removal of their offices from 721 Brown Building to 505-506 Brown Building, 321 West Broadway, Louisville.

Dr. B. M. Mummell of Fort Pierce, Florida, who graduated from Tufts' Medical College at Boston and who had several years hospital at Boston City Hospital, is now associated with Dr. M. M. Dunn, Richmond, whose practice is limited to eye, ear, nose and throat.

Dr. Robert Cregor Bateman, member of the Madison County Medical Society, now stationed at Fort Knox for active duty with the United States Army Medical Corps, was married to Miss Charlotte Almada Wible at Lexington, Kentucky on December 19, 1940.

The New Orleans Graduate Medical Assembly will hold its fifth annual meeting March 3, 4, 5 and 6, 1941 at the Roosevelt Hotel, New Orleans.

The attendance last year was over one thousand, and every effort will be made for this meeting to be the best ever held. The Grand Ball Room of the hotel will be devoted to the exhibit space. Anyone interested in attending this meeting may write to Dr. R. M. Willoughby, Chairman, 1430 Tulane Avenue, New Orleans, also for the program and other details.

Dr. Florence Brandeis, age 80, one of the pioneer women physicians of Kentucky and a first cousin of Former United States Court Justice Louis Brandies, died at her home in Louisville.

Dr. Louis Fine, for the past three years director of the Hancock County Health Department, with headquarters at Hawesville, was appointed by the State Board of Health to replace Dr. G. M. Wells as director of the Warren County Health Department during the year Dr. Wells is to be in regular army service with Bowling Green National Guardsmen. Dr. Wells is commander of the 149th Infantry Medical Detachment with the rank of Major. Three companies of Bowling Green Guards and the 149th Infantry Band are to be inducted into Federal service January 17.

Dr. Shelton Cohn, age 62, died at Fulton, Tuesday, February 6, 1940.

Dr. N. C. Witt, who has been Secretary of the Simpson County Medical Society for twenty-seven years, has resigned, and Dr. R. L. Wilson was elected as his successor.

The Pineville Community Hospital, Pineville, Kentucky has just recently added a new addition, making this one of the most complete hospitals in the state. Their laboratory has been approved by the State Department of Health for testing of blood for the pre-marital law.

The Southern Surgical Association held its annual meeting at Homestead Hotel, Hot Springs, Virginia, December 10-11-12, 1940, with a large attendance including some of the outstanding surgeons of the South and in fact of the nation.

The program was well arranged, consisting of eight essays for each of two daily sessions. Dr. J. Staige Davis of Baltimore, the President, occupied the chair. Dr. Alton Ochsner of New Orleans was Secretary. Every paper given was completed on schedule time, and the material submitted was excellent and brought out worth while discussion.

Dr. Rudolph Mates of New Orleans and Dr. L. Wallace Frank of Louisville were unable to be present and give their papers; which will appear in the Transactions. Louisville and Kentucky were well represented by Fellows and guests in attendance.

Hot Springs is an ideal spot for such a meeting and hotel service with the location was most satisfactory.

Dr. Harry H. Kerr of Washington, D. C. was elected President for next year. Dr. Ochsner was reelected Secretary.

Dr. Charles B. Kobert, age 60, died of a heart attack at Danville, December 12th, where he has resided since he retired from the practice of medicine in Lebanon. He was a graduate of Centre College and the Cincinnati Medical School, and served as an army physician during the World War, and was selected by the State Board of Health in 1920 to head its just established Bureau of Trachoma.

Dr. Joseph Thomas Noe, Louisville, a first lieutenant in the Army Medical Reserve, recently was ordered to active duty in the First Armored Division, Fort Knox. A 1937 graduate of the University of Louisville School of Medicine, Dr. Noe completed his internship in New York City.



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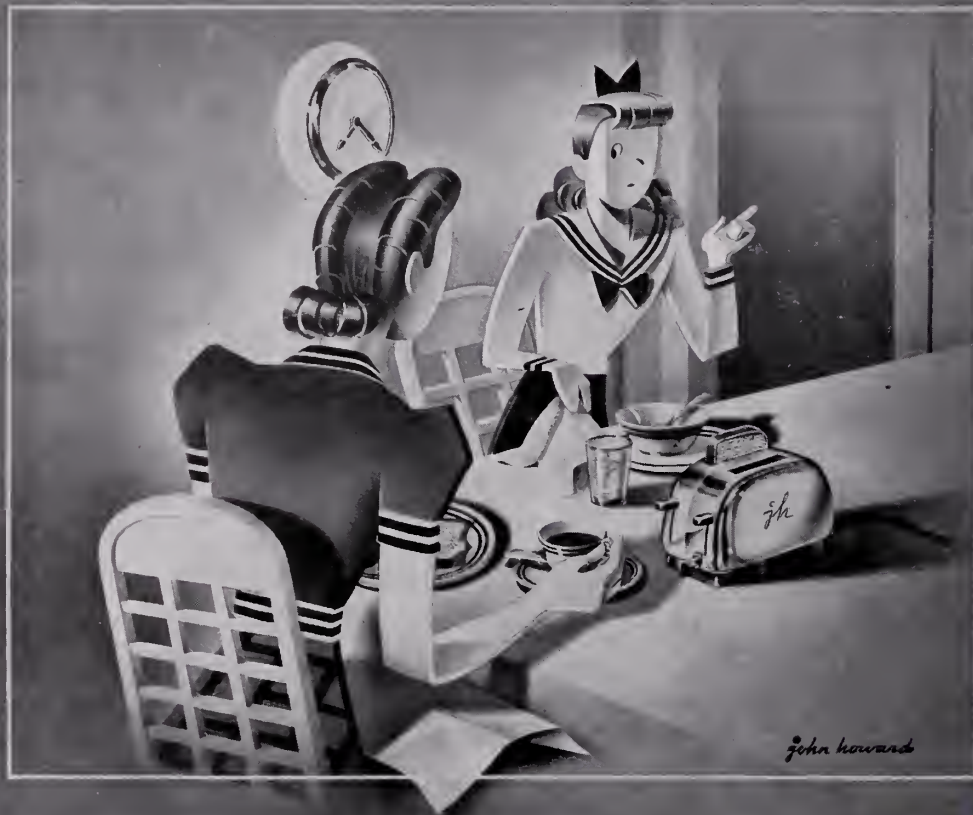
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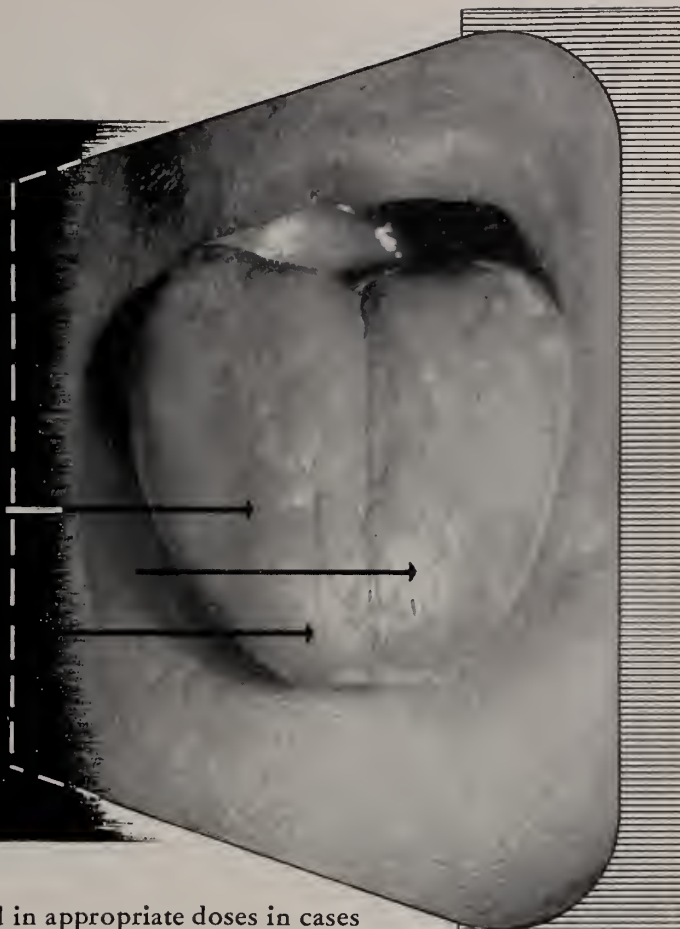


\*Petrolagar—The trademark of Petrolagar Laboratories, Inc., brand emulsion of mineral oil . . . Liquid petrolatum 65 cc. emulsified with 0.4 gm. agar in menstruum to make 100 cc.



# Nicotinic Acid<sup>(UPJOHN)</sup>

The glossitis of pellagra is only one of the evidences of nicotinic acid deficiency, but is one which is quite commonly present; characteristically, the tongue is beefy red, the mucous membrane smooth and usually dry.



The administration of nicotinic acid in appropriate doses in cases of pellagra leads to the clearing of alimentary lesions and symptoms, including the typical glossitis, to the disappearance of dermal lesions characteristic of the disease, and to profound improvement in the mental symptoms when the latter are the result of inadequate intake of nicotinic acid.

Pellagra, however, is frequently accompanied by evidences of deficiencies of other factors of the vitamin B complex, such as polyneuritis (a manifestation of vitamin B<sub>1</sub> deficiency). In the diets of such patients it may be necessary to insure the presence of foods rich in the vitamin B complex, or to administer—concurrently with the nicotinic acid—thiamine hydrochloride, riboflavin, and, in some instances, pyridoxine hydrochloride.

Nicotinic acid is pyridine-3-carboxylic acid—C<sub>6</sub>H<sub>5</sub>O<sub>2</sub>N. It is recognized as a specific in the treatment of the disease of dogs known as blacktongue and in the treatment of human pellagra.



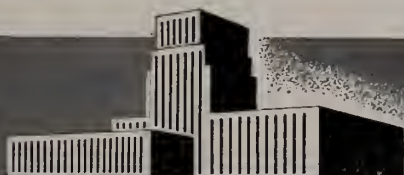
Available at your prescription pharmacy in the following dosage forms:

C. T. Nicotinic Acid,  
20 mg.

C. T. Nicotinic Acid,  
50 mg.

C. T. Nicotinic Acid,  
100 mg.

in bottles of 100 and  
1000 tablets.



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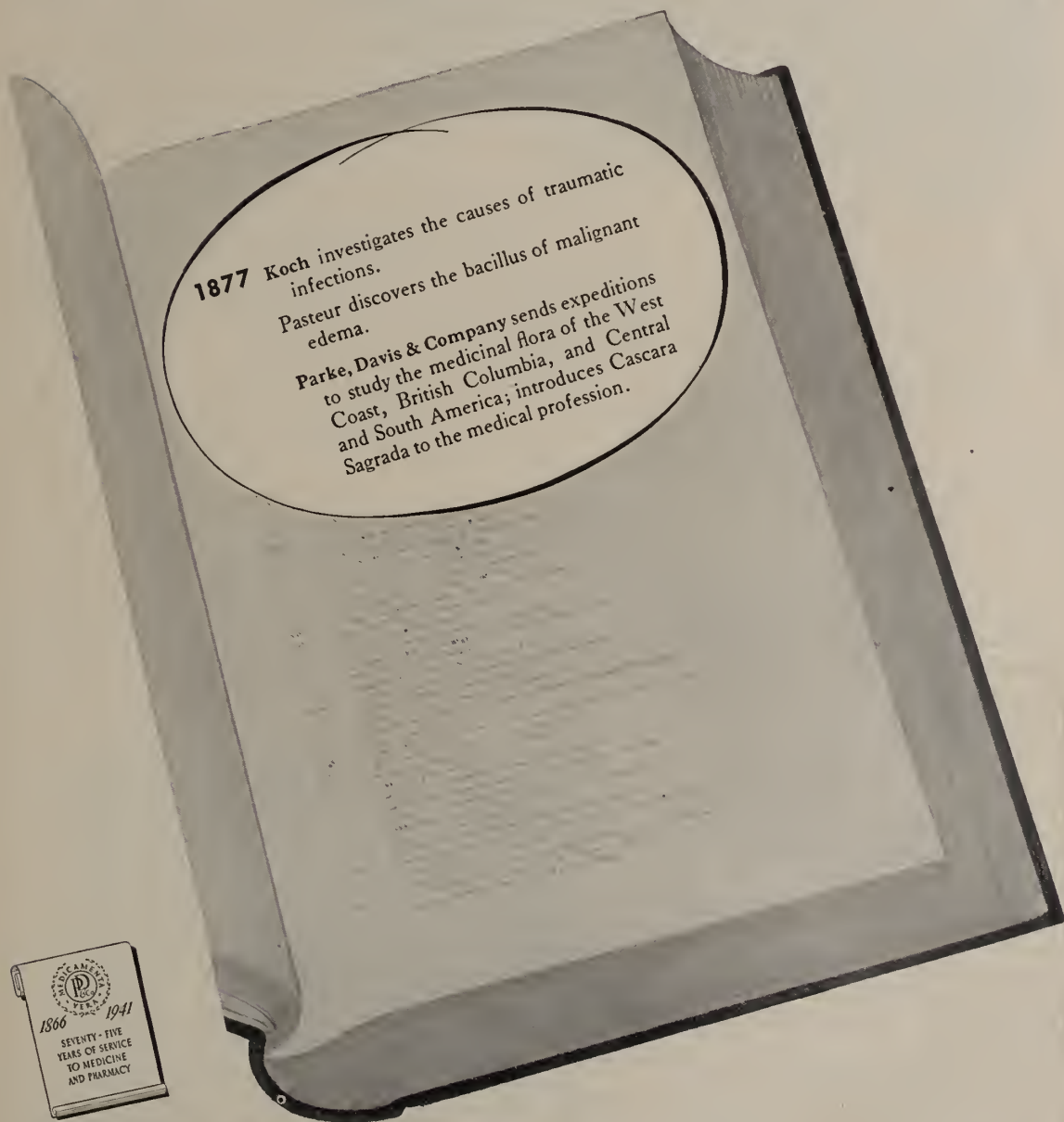
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Pasteur discovers the bacillus of malignant edema.  
Parke, Davis & Company sends expeditions to study the medicinal flora of the West Coast, British Columbia, and Central and South America; introduces Cascara Sagrada to the medical profession.



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Established More Than Fifty Years Ago



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Division of Mental Diseases  
STATE OF OHIO

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The American College of Surgeons  
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JAMES S. RICH, M. D., Roentgenologist  
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JOHN A. GALLOGLY, M. D., Fellow in Surgery

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of Acute Anterior*  
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(DUE TO NEISSERIA GONORRHEAE)

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph. Gon. & Ven. Dis., 23, 201 (March) 1939.

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Economical*

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Maltose.....	18
Dextrose.....	12
Sucrose.....	4
Invert sugar.....	3
Minerals.....	0.6
Moisture.....	25
(Karo—Blue Label)	

## Same Caloric Values

1 oz. vol.....	40 grams
	120 cal.
1 oz. wt.....	28 grams
	90 cal.
1 teaspoon.....	20 cal.
1 tablespoon.....	60 cal.





## CALENDAR OF COUNTY SOCIETY MEETINGS

COUNTY	SECRETARY	RESIDENCE	DATE
Adair.....	Todd Jeffries.....	Columbia.....	March 5
Allen.....	A. O. Miller.....	Scottsville.....	March 26
Anderson.....	J. B. Lyen.....	Lawrenceburg.....	March 3
Ballard.....	F. H. Russell.....	Wickliffe.....	March 11
Barren.....	Rex Hayes.....	Glasgow.....	March 19
Bath.....	H. S. Gilmore.....	Owingsville.....	March 10
Bell.....	E. S. Wilson.....	Pineville.....	March 14
Boone.....	R. E. Ryle.....	Walton.....	March 19
Bourbon.....	B. N. Pittenger.....	Paris.....	March 20
Boyd.....	C. C. Sparks.....	Ashland.....	March 4
Boyle.....	P. C. Sanders.....	Danville.....	March 18
Bracken-Fendleton.....	W. A. McKenney.....	Falmouth.....	March 27
Breathitt.....	Philip Bress.....	Jackson.....	March 18
Breckinridge.....	J. E. Kincheloe.....	Hardinsburg.....	March 13
Bullitt.....	George B. Hill.....	Mt. Washington.....	
Butler.....	D. J. Miller, Jr.....	Morgantown.....	March 5
Caldwell.....	W. L. Cash.....	Princeton.....	March 4
Calloway.....	J. A. Outland.....	Murray.....	
Campbell-Kenton.....	Joseph H. Humpert.....	Covington.....	March 6
Carlisle.....	E. E. Smith.....	Bardwell.....	March 4
Carroll.....	H. Carl Bowen.....	Carrollton.....	
Carter.....	Don E. Wilder.....	Grayson.....	March 11
Casey.....	William J. Sweeney.....	Liberty.....	March 27
Christian.....	D. M. Clardy.....	Hopkinsville.....	March 18
Clark.....	R. E. Strobe.....	Winchester.....	March 21
Clay.....	L. H. Wagers.....	Manchester.....	
Clinton.....	S. F. Stephenson.....	Albany.....	March 15
Crittenden.....	C. G. Moreland.....	Marion.....	March 10
Cumberland.....	W. F. Owsley.....	Burkesville.....	March 5
Davless.....	Irvin Bensman.....	Owensboro.....	March 11 & 25
Elliott.....	W. H. Joyner (Acting Sec.).....	Sandy Hook.....	
Estill.....	Virginia Wallace.....	Irvine.....	March 12
Fayette.....	D. E. Scott.....	Lexington.....	March 11
Fleming.....	Roy Orsburn.....	Flemingsburg.....	March 12
Floyd.....	J. G. Archer.....	Prestonsburg.....	March 26
Franklin.....	Grace R. Snyder.....	Frankfort.....	March 6
Fulton.....	M. W. Haws.....	Fulton.....	March 12
Gallatin.....	J. M. Stallard.....	Sparta.....	March 20
Garrard.....	J. E. Edwards.....	Lancaster.....	March 20
Grant.....	Lenore Patrick.....	Williamstown.....	March 19
Graves.....	H. H. Hunt.....	Mayfield.....	March 4
Grayson.....			
Green.....	S. J. Simmons.....	Greensburg.....	March 3
Greenup.....	L. C. Bate.....	Greenup.....	March 14
Hancock.....	F. M. Griffin.....	Hawesville.....	March 3
Hardin.....	D. E. McClure.....	Elizabethtown.....	March 13
Harlan.....	M. W. Howard.....	Harlan.....	March 15
Harrison.....	W. B. Moore.....	Cynthiana.....	March 3
Hart.....	Gordon L. Green.....	Horse Cav.....	March 4
Henderson.....	J. Leland Tanner.....	Henderson.....	March 10 & 24
Henry.....	Owen Carroll.....	New Castle.....	March 13
Hickman.....	Lawson B. Swann.....	Clinton.....	March 6
Hopkins.....	David L. Salmon.....	Madisonville.....	March 6
Jackson.....	Mary T. Arnold.....	McKee.....	March 1
Jefferson.....	B. W. Smock.....	Louisville.....	March 3 & 17
Jessamine.....	J. A. VanArsdall.....	Nicholasville.....	March 20
Johnson.....	A. D. Slone.....	Paintsville.....	March 24
Knott.....			
Knox.....	T. R. Davies.....	Barbourville.....	March 20
Larue.....			
Laurel.....	Oscar D. Brock.....	London.....	March 12
Lawrence.....	L. S. Hayes.....	Louisa.....	March 17
Lee.....	W. D. McCollum.....	Beattyville.....	March 8
Leslie.....	John H. Kooser (Acting Sec.).....	Hyden.....	
Letcher.....	T. M. Ferry.....	Jenkins.....	March 25
Lewis.....			March 17
Lincoln.....	Lewis J. Jones.....	Hustonsville.....	March 21
Livingston.....	C. M. Fischbach.....	Smithland.....	
Logan.....	E. M. Thompson.....	Russellville.....	March 5
Lyon.....	H. H. Woodson.....	Eddyville.....	March 4
McCracken.....	J. V. Pace.....	Paducah.....	March 26
McCreary.....	R. M. Smith.....	Stearns.....	March 3
McLean.....	Alan R. Will.....	Calhoun.....	March 13
Madison.....	Robert L. Rice.....	Richmond.....	March 20
Magoffin.....			

COUNTY	SECRETARY	RESIDENCE	DATE
Marion.....	W. E. Oldham.....	Lebanon.....	March 25
Marshall.....	S. L. Henson.....	Benton.....	March 19
Martin.....			
Mason.....	C. W. Christine.....	Maysville.....	March 12
Meade.....	S. H. Stith.....	Brandenburg.....	March 27
Menifee.....	E. T. Riley.....	Frenchburg.....	
Mercer.....	J. Tom Price.....	Harrodsburg.....	March 11
Metcalfe.....	E. S. Dunham.....	Edmonton.....	March 4
Monroe.....	Geo. E. Bushong.....	Tompkinsville.....	
Montgomery.....	D. H. Bush.....	Mount Sterling.....	March 11
Morgan.....			
Muhlenberg.....	E. L. Gates.....	Greenville.....	March 11
Nelson.....	R. H. Greenwell.....	Bardstown.....	March 19
Nicholas.....	T. F. Scott.....	Carlisle.....	March 17
Ohio.....	Oscar Allen.....	McHenry.....	March 5
Oldham.....			March 4
Owen.....	K. S. McBee.....	Owenton.....	March 6
Owsley.....	W. H. Gibson.....	Booneville.....	March 3
Perry.....	D. D. Turner.....	Hazard.....	March 10
Pike.....	F. H. Hodges.....	Pikeville.....	March 4
Powell.....	I. W. Johnson.....	Stanton.....	March 3
Pulaski.....	M. C. Spradlin.....	Somerset.....	March 13
Roberts.....			
Rockcastle.....	Lee Chestnut.....	Mount Vernon.....	March 7
Rowan.....	A. W. Adkins.....	Morehead.....	March 10
Russell.....	J. R. Popplewell.....	Jamestown.....	March 10
Scott.....	A. Y. Covington.....	Georgetown.....	March 6
Shelby.....	A. D. Doak.....	Shelbyville.....	March 20
Simpson.....	L. R. Wilson.....	Franklin.....	March 11
Spencer.....			
Taylor.....	W. B. Atkinson.....	Campbellsville.....	March 6
Todd.....	B. E. Boone, Jr.....	Elkton.....	March 5
Trigg.....			March 26
Trimble.....			
Union.....	E. Bruce Underwood.....	Morganfield.....	March 4
Warren-Edmonson.....	W. O. Carson.....	Bowling Green.....	March 12
Washington.....	J. H. Hopper.....	Willisburg.....	March 19
Wayne.....	Frank L. Dnnan.....	Monticello.....	
Webster.....	C. M. Smith.....	Dixon.....	March 28
Whitley.....	C. A. Moss.....	Williamsburg.....	March 6
Wolfe.....			March 3
Woodford.....	George H. Gregory.....	Versailles.....	March 6

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# KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

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VOL. 39, No. 3

BOWLING GREEN, KY.

MARCH, 1941

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## PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION

The American Medical Association advocates:

1. The establishment of an agency of federal government under which shall be coordinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American System of democracy.

## EDITORIALS

## DR. WILLIAM NILES WISHARD .

It is just a little difficult to think of the medical profession of Indiana without its distinguished dean, Dr. William Niles Wishard, who died in Indianapolis on Wednesday, January 22, 1941. Dr. Wishard and his father had been leaders of medicine in Indiana for more than one hundred years and few men have exercised a more valuable and more potent influence in American Medicine.

In the first place, Dr. Wishard was a splendidly qualified physician. Since 1879 he had devoted himself to the practice of urology. He performed the first prostatectomy in Indiana. Starting in the early days of this branch of medicine, he was always a leader in it, and hundreds of physicians and tens of thousands of patients—many of whom never knew nor heard of him—are the better because he lived.

In addition to and beyond the purely professional and scientific service which he rendered to his patients, Dr. Wishard was a medical statesman of the first order. He rarely missed a meeting of his county medical society and of the state medical association. He was one of those great men who helped to establish the Indiana State Medical Association on a sound basis. For many years he was a member of the House of Delegates of the American Medical Association and served on its most important committees. Few men contributed more to the effectiveness and servability of the organized medical profession of the United States.

Associated with Dr. C. A. Daugherty, Dr. Edwin Walker, Dr. A. E. Bulson and others of like caliber, he set standards of medical activities that have not been exceeded in this country or anywhere else.

Dr. Wishard was a large man, had a very firm countenance, as much moral courage and sound judgment as any one I have ever known, but he was as quiet as a lamb with it all.

There is one incident in his life that should be permanently recorded. For a number of years the American Medical Association had gone on record by the unanimous vote of its House of Delegates in general session as favoring a Secretary of Public Health in the cabinet of the President of the United States. This highly desirable purpose had the cordial support of both President Theodore Roosevelt and President Woodrow Wilson, although due to the combined influence of

certain subversive elements in the profession, chiefly located in the Cook County Medical Society in Chicago, the legislative program of the Association was being sabotaged and its leaders determined that it would be better to elect my father, Dr. J. N. McCormack, as president on a definite platform for the establishment of a Secretary of Public Health. This movement was led by Dr. John B. Murphy, then president, and Dr. Daugherty and the active leaders in the opposition were the late Dr. M. L. Harris of Chicago, and Dr. E. C. Cantrell of Texas.

During the meetings of the House of Delegates in Los Angeles in 1911, Dr. Wishard was approached by the opposition with the suggestion that he be made president. This could have been accomplished by a unanimous vote of the House of Delegates as every one loved him and had confidence in him. My father was perfectly willing to withdraw in his favor, but after Dr. Wishard had conferred with his associates, he made the definite statement that my father's election was essential, if we would win our legislative fight in Washington, and he would not permit his name to be used in the matter.

The opposition then named Dr. Abraham Jacobi of New York, and elected him. Dr. Jacobi was not present at the meeting. He was one of the very greatest men who has held this exalted position.

Dr. Wishard unquestionably could have been elected unanimously president, had he been willing to accept it, but his loyalty to the profession and his friendship for my father caused him to refuse this very great honor. "Greater love hath no man than this, that he lay down his life for a friend."

Dr. Wishard was unwilling to sacrifice either his loyalty to the profession or to his friend. Upon his monument should be inscribed "Sans peur et sans regret."

## THE STATE HOSPITALS

Governor Johnson acting with the advice of the Medical Advisory Committee which had been appointed by the Kentucky State Medical Association appointed Dr. A. M. Lyon, of Sandy Hook, Kentucky, as Director of Hospitals and Mental Hygiene to succeed Dr. J. G. Wilson, who resigned. Following Dr. Wilson's resignation and the nomination of three qualified psychiatrists, one of whom would be appointed to succeed him, there were numerous meetings of the Advisory Committee with Governor Johnson.



The members of the Committee were very much impressed with his determination to place the institutions upon a sound professional and humanitarian basis. He asked the Committee to make recommendations which could be adopted within the Chandler-Wallis Act, which would safeguard the integrity of the personnel of the institutions.

Both before and after Dr. Lyon's appointment the Committee had several conferences with the superintendents of the mental hospitals and of the Feeble-minded Institute, and their recommendations will be found on another page of this JOURNAL, they having already been incorporated into the formal regulations.

With the sincere cooperation of all of the agencies affected, the Kentucky State Medical Association feels secure in saying to the people of the state that a new era is opened up in the humane and scientific care of the people who are mentally ill.

This is another historic occasion where the organized medical profession of Kentucky has done its part in the service of the people.

---

### THE PEDIATRIC POST GRADUATE COURSE

A practical course in post graduate Pediatrics will be given at the Children's Free Hospital beginning Wednesday, April 23 from 9 A. M. to 1 P. M. These lectures will be given every Wednesday for ten weeks and physicians living within 75 to 100 miles of Louisville can attend these lectures and clinics and get back home in time to finish up their daily work.

Particular attention is given to the methods of combating acidosis and dehydration, and to intravenous or other methods of administering alkali, glucose or blood transfusions. The presentation of the interesting cases in the hospital, with the complete study made with X-ray, blood and stool analysis and so forth, with discussion by the Staff and the doctors present will be especially interesting and helpful.

A nominal fee of \$5.00 is charged for the course which takes care of certain necessary expenses. The full program will be published in the next issue of the JOURNAL. Any one interested may write to Dr. W. W. Nicholson, 423 Heyburn Building, Louisville.

PHILIP F. BARBOUR.

### AN ALLEGED UNHOLY ALLIANCE

Apparently authoritative information from several localities has just come to our attention that physicians and nurses have been accepting money from unscrupulous undertakers for securing business for them, either in ambulance service or funerals, or both. In some instances it is said that the fee for the funeral service has been split as much as fifty per cent.

We know that such an allegation could be true of only a very small number of either physicians or nurses, but we feel that it is incumbent upon us to call this to the attention of the whole profession because even though a single man or woman were guilty of such a crime, it is a reflection on the whole profession.

We have communicated with the Board of Nurses Examiners and the Board of Examiners for Embalmers and Undertakers, and we want to give notice, now, that this situation must be cleaned up. Nurses, undertakers and physicians who have been participating in this plan must understand that evidence of guilt in such a procedure will be cause for revocation of certificate and for criminal prosecution under state and federal anti-trust laws.

We wish to suggest that the councilors bring this matter to the especial attention of the profession in Bell, Henderson and Floyd counties, where the practice appears to be notorious. It affects only one or two men in each instance and they must either stop this practice, or they will be put where they cannot continue it.

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### THE JEFFERSON COUNTY MEDICAL SOCIETY

Nineteen hundred and forty-one may prove to be one of history's most eventful years. The present state of world unrest and almost world wide warfare finds the American public expectant if not apprehensive.

Though our interest is more or less centered upon international affairs we must not be unmindful of what is going on about us.

From every tongue we hear the word "preparedness" and for the time let us apply it to local affairs.

The Jefferson County Medical Society is preparing to entertain the Kentucky State Medical Association this fall and trusts that you will help make it an eventful meeting.

We must be prepared to meet the daily problems we encounter, and it is just such

problems that are discussed at our annual meeting. Prepare now to be with us in Louisville when the Jefferson County Medical Society says—"You're welcome" to the State Society.

May you be reminded, also, that the Jefferson County Medical Society meets on the first and third Mondays of each month from September until June. The meetings are held at the City Hospital at 8:00 P. M. You will find the presentations of the members and guest speakers interesting and instructive.

We shall feel honored to have any member of the State Medical Association attend our meetings, where he will be granted all the courtesies that have made our profession a paragon.

M. J. HENRY, President.

### POTENT AND HABIT-FORMING DRUGS

Under the official announcement in this issue of the JOURNAL will be found a communication from the Food and Drug Administration of the Federal Security Agency in Washington which is of importance to every physician in Kentucky as well as to our friends, the pharmacists, and to the general public. The new Federal Food, Drug and Cosmetic Act forbids the indiscriminate sale of drugs labeled for restricted sale.

A typical list of such drugs would include barbiturates, cinchophen, neocinchophen, other cinchophen derivatives, cantharides (for internal use), aminopyrine, sulfanilamide, sulfapyridine, sulfathiazole, thyroid, aconite, benzedrine sulfate (for internal administration), chrysarobin or goa powder, chrysophanic acid, colchicine, colchium, emetine, phosphides, phosphorus, radium, thiocyanates, the anthelmintic drugs, carbon tetrachloride, tetrachlorethylene, male fern (*aspidium*), santonin, wormseed oil (*chenopodium* oil), and thymol.

Hereafter these drugs can only be sold by druggists on the prescription of a physician, and the Council has approved a regulation by the State Department of Health, providing that the prescription shall be marked N. R. (non-refillable).

Increasingly dangerous and indiscriminate use of the drugs of these classes is becoming apparent to all of us. The fact that they are potent for the condition for which they are prescribed by the physician makes it especially incumbent on our profession that this should only be done with great care where the indications are that no other drug will serve the need so well.

These sections of the law can only be efficiently enforced with the complete cooperation of every physician in the state. We are assured by the State Board of Pharmacy that the registered pharmacists of the state are in full sympathy with this section of the new law and that we can count on their complete cooperation. It is up to us to help each other for the good of the public.

### APPROVED LABORATORIES

Laboratories approved by the State Commissioner of Health for the performance of serological tests, in accordance with the prerequisites of the Prenatal and Premarital Laws, total 59 at this writing and others are now being evaluated. It has been found that laboratories are rarely self-supporting unless they have a sufficient number of tests to absorb the expense of personnel, the replacement of equipment and the usage of materials. Any community desiring the convenience of such a laboratory may obtain one by having a practicing physician or group of practicing physicians apply to the State Commissioner of Health and comply with the following regulations:

An approved serological laboratory must be under the direct supervision of a physician duly licensed to practice medicine in Kentucky. The technician must be a graduate of a school approved by the American Society of Clinical Pathologists or the American Medical Association.

Every laboratory seeking approval must examine at least two hundred test specimens for comparison with and evaluation by the control laboratory. In the case of the Kahn test, the control laboratory is that of Dr. R. L. Kahn, author of the test. According to the standards set up by the National Committee on the Evaluation of Laboratories for the Serodiagnosis of Syphilis, the results are based on two findings: sensitivity (freedom from false negatives) and specificity (freedom from false positives). One per cent error is allowed for specificity and ten per cent variation from the control laboratory is allowable in sensitivity. If a laboratory seeking approval under these conditions comes within the allowable variation, it is then approved by the State Commissioner of Health and its reports are acceptable under the requirements of the Prenatal and Premarital Laws.

To remain on the approved list the laboratory must accept a number of test specimens each year and their performance must always be in accordance with



the standards set by the National Committee on the Evaluation of Laboratories for the Serodiagnosis of Syphilis of the United States Public Health Service. Solicitation of work under the Premarital Law is, of course, unethical.

No laboratory report is legal unless it is signed by a qualified, registered physician who is responsible for its correctness. Laboratory reports for prenatal and premarital examinations can be made only upon the request of the examining physician. The results of these examinations are confidential and must, under no consideration, be delivered to the persons examined, nor must the results of the test be revealed to anyone except the physician requesting the test. It is permissible for a laboratory worker to take the specimen of blood, if the physician requests it, and perform the test, but the result of the examination

must be sent to the physician, either by mail or by messenger, in a sealed envelope.

It is particularly important to remember always that no examination may be made and charged for by any hospital or any corporation per se. Pathology and laboratory work constitute an integral part of the practice of medicine and neither hospitals nor corporations may engage in the practice of medicine for remuneration in Kentucky. Hospitals cannot make tests for lay individuals as such; all such requests must come from licensed physicians. The procedure is for physicians using approved laboratories to include the laboratory costs in their fees and, in turn, remit these costs to the laboratories making the tests. Together we are engaged in the campaign to reduce the ravages of syphilis and it will benefit all the people so long as everyone cooperates in this undertaking.

COUNTY	CITY	DIRECTOR OF LABORATORY	NAME OF LABORATORY
Barren	Glasgow	C. C. Turner, M. D.	T. J. Samson Community Hospital
Bell	Middlesboro	C. C. Brummett, M. D.	Middlesboro Hospital
	Pineville	C. B. Stacy, M. D.	Pineville Community Hospital
Bourbon	Paris	Wm. Kenney, M. D.	Wm. Kenney, M. D.
	Paris	J. C. Hart, M. D.	Massie Memorial Hospital
Boyd	Ashland	R. D. Higgins, M. D.	Boyd County Health Department
	Ashland	Leslie Winans, M. D.	King's Daughters' Hospital
Calloway	Murray	E. D. Fisher, M. D.	Wm. Mason Memorial Hospital
Campbell	Newport	Luther Bach, M. D.	Luther Bach, M. D.
	Dayton	S. P. Garrison, M. D.	Speers Memorial Hospital
Daviess	Owensboro	I. J. Hoover, M. D.	Clinical Laboratory
	Owensboro	J. M. Coffman, M. D.	Coffman-Sherman Laboratory
Fayette	Lexington	Kenneth R. Andrews, M. D.	Kenneth R. Andrews, M. D.
	Lexington	Arthur Bach, M. D.	Arthur Bach, M. D.
	Lexington	Irving F. Kanner, M. D.	Irving F. Kanner, M. D.
	Lexington	E. S. Maxwell, M. D.	Lexington Clinic
	Lexington	E. S. Maxwell, M. D.	St. Joseph's Hospital
Floyd	Wheelwright	J. W. Bailey, M. D.	Inland Steel Company Hospital
Graves	Mayfield	James T. Fuller, M. D.	Fuller-Gilliam Hospital
	Mayfield	E. C. Walter, M. D.	Mayfield Hospital
Greenup	Russell	Alonzo Huffman, M. D.	Huffman Clinic
	Russell	C. B. Johnson, M. D.	C. B. Johnson, M. D.
Harlan	Harlan	W. R. Parks, M. D.	Harlan Diagnostic Laboratory
	Lynch	Carlisle R. Petty, M. D.	Lynch Hospital
Jefferson	Louisville	C. W. Dowden, M. D.	Drs. Dowden & Dowden
	Louisville	Morris Flexner, M. D.	Morris Flexner, M. D.
	Louisville	H. M. Weeter, M. D.	Jewish Hospital
	Louisville	J. D. Allen, M. D.	Kentucky Baptist Hospital
	Louisville	J. Murray Kinsman, M. D.	J. Murray Kinsman, M. D.
	Louisville	Hugh N. Leavell, M. D.	Louisville City Hospital
	Louisville	W. H. Allen, M. D.	Louisville Research Laboratory
	Louisville	A. B. Loveman, M. D.	A. B. Loveman, M. D.
	Louisville	W. C. Martin, M. D. and	Drs. Martin & McNeill
	Louisville	Clyde McNeill, M. D.	
	Louisville	Robert F. Monroe, M. D.	Robert F. Monroe, M. D.
	Louisville	Clyde McNeil, M. D.	Norton Memorial Infirmary
	Louisville	James G. Hutchinson, M. D.	Physicians Laboratory
	Louisville	J. C. Ray, M. D.	The Ray Clinic
	Louisville	J. D. Allen, M. D.	St. Anthony's Hospital
Johnson	Louisville	H. M. Weeter, M. D.	St. Joseph's Infirmary
	Louisville	H. M. Weeter, M. D.	S. S. Mary & Elizabeth Hospital
	Louisville	L. H. South, M. D.	State Department of Health
	Louisville	H. M. Weeter, M. D.	Weeter Clinical Laboratory
	Faintsville	F. M. Picklesimer, M. D.	Paintsville Clinic
Kenton	Paintsville	Lon C. Hall, M. D.	Paintsville Hospital
	Covington	Alfred M. Glazer, M. D.	Booth Memorial Hospital
Letcher	Covington	Alfred M. Glazer, M. D.	St. Elizabeth's Hospital
	Jenkins	E. F. Sheppard, M. D.	Jenkins Hospital
McCracken	Paducah	V. L. Powell, M. D.	Illinois Central Hospital
	Paducah	Warren P. Sights, M. D.	Riverside Hospital
Mason	Maysville	A. R. Quigley, M. D.	Hayswood Hospital
Mercer	Harrodsburg	C. B. Van Arsdall, M. D.	Mercer Laboratory
Muhlenberg	Greenville	G. L. Simpson, M. D.	Muhlenberg Community Hospital
Pike	Pikeville	H. I. Berman, M. D.	Methodist Hospital
Russell	Jamestown	M. M. Lawrence, M. D.	M. M. Lawrence, M. D.
Simpson	Franklin	L. R. Wilson, M. D.	Wilson Clinic
Union	Morganfield	D. L. Vaughn, M. D.	Darrel L. Vaughn Laboratory
Warren	Bowling Green	G. Y. Graves, M. D.	Graves-Gilbert Clinic
	Bowling Green	Hoy Newman, M. D.	Physicians Laboratory
Whitley	Corbin	F. S. Smith, M. D.	Smith Hospital

## OFFICIAL ANNOUNCEMENTS

RECOMMENDATIONS TO THE GOVERNOR, COMMISSIONER OF WELFARE, AND THE DIRECTOR OF HOSPITALS AND MENTAL HYGIENE BY THE MEDICAL ADVISORY COMMITTEE OF THE KENTUCKY STATE MEDICAL ASSOCIATION.

1. The Superintendents of each of the State Hospitals and of the Feeble-minded Institute will be in complete control of their respective institutions under rules and regulations made by the Director of Hospitals and Mental Hygiene, and approved by the Commissioner of Welfare, and the Superintendents will select all employees from lists of eligibles certified as qualified by the Director of Personnel of the Department of Finance.

2. Such employees will be selected for a probationary employment period, not to exceed three (3) months, and then a provisional appointment of six (6) months will be made, after which they will be removed by the superintendent only for a cause deemed sufficient by him.

3. No employee will be retained who gambles or drinks alcoholic beverages while on duty or on the premises, or who becomes inebriated at any place or time; nor who takes any habit-forming drugs except on the prescription of a physician; nor who is guilty of cruelty or unnecessary force in the management of any patient; nor who is guilty of insubordination or of gross immorality nor who is unattentive or not punctual in the performance of services; nor who is not kindly and considerate to the patients.

4. It is to be understood by the entire personnel of each institution, professional and otherwise, that the Superintendent is in entire control of the institution and that all contacts with the Director of Hospitals and Mental Hygiene and with the Commissioner of Welfare must be made through him.

5. The Director of Hospitals and Mental Hygiene is to be in general charge of and will have supervision over the Superintendents, who will report to him for his approval the employment or discharge of all employees.

6. It is suggested that frequent meetings of the Director of Hospitals and Mental Hygiene with the Superintendents be held for the discussion and solution of common problems.

7. Each Superintendent will hold regular staff meetings of his scientific per-

sonnel and will arrange for intra-mural training of attendants and other personnel as will secure the best possible services for the inmates of the institution.

8. The recruiting of personnel will be done through the Superintendents, the County Health Departments and the Medical Referees of each county. The State Health Commissioner will instruct the County Health Officers to ask the public health nurses to be on the lookout for kindly men and women who are capable of doing this type of work. When they find eligibles, they will report them, when approved by the Medical Referee, to the Director of Hospitals and Mental Hygiene. Eligibles found by the Superintendents will be reported in the same way, and all such eligibles will be examined by the Division of Personnel, and lists of such eligibles will be furnished by the Director to the Superintendents of each institution.

9. It will be the purpose of this plan to provide each Superintendent with a group of approved persons from which he can make his selections for attendants. It will be the purpose to have twenty-five (25) eligibles ready for selection by each Superintendent, as far as this is found practicable.

10. The importance of having qualified negro attendants for negro inmates is emphasized.

11. Where it is found advisable and economically practicable, the Director of Hospitals and Mental Hygiene will arrange for the concentration of particular groups of patients at those institutions where facilities can be developed for the best treatment of that particular type of mental illness.

12. Affiliation of the Central State Hospital with the Psychiatric Department of the Medical School of the University of Louisville, will be arranged with such interchange of teaching and consultative personnel as may be found advisable.

12a. The Director of Hospitals and Mental Hygiene will arrange with the Assistant Commissioner of Health for such cooperative programs in Mental Health as will contribute to the successful administration of field work in Mental Health.

These recommendations were presented to the Governor, the Commissioner of Welfare, and the Director of Hospitals and Mental Hygiene, at a meeting in Frankfort, Kentucky, on January 27, 1941, at which meeting the Superintendents of the several institutions were also present, and



were approved as principles which will govern the administration of the state institutions for the mentally ill under the Chandler-Wallis Act.

W. E. GARDNER, M. D., Chairman  
E. B. BRADLEY, M. D.  
IRVIN ABELL, M. D.  
AUSTIN BELL, M. D.  
A. C. McCARTY, M. D.  
C. C. HOWARD, M. D.  
A. T. McCORMACK, M. D.

#### A WARNING FROM FOOD AND DRUG ADMINISTRATION

W. S. Frisbee, Chief of the Division of State Cooperation of the Food and Drug Administration, Washington, sends the following warning to all state regulatory drug officials and state boards of pharmacy:

Reports reaching the Food and Drug Administration indicates that there are occurring violations of the Federal Food, Drug, and Cosmetic Act by retail druggists in the indiscriminate sale of drugs manufactured in another State and labeled for restricted sale. Our investigations in certain areas have confirmed the accuracy of these reports.

Section 502 (f) (1) of the Act requires drugs to bear labeling giving adequate directions for use. The Act authorizes exemption by regulation from this requirement. Under this mandate, an exemption has been authorized applicable only to drugs intended for professional use or dispensed on prescription. This exemption authorizes omission of directions where the label carries the phrase "Caution: To be used only by or on the prescription of a \_\_\_\_\_" to be filled in by the word "Physician," "Dentist," or "Veterinarian." The basis for this exemption, as will be immediately apparent, is that the physician's specific directions for each individual patient will be far more adequate than any general directions supplied by the manufacturer. The regulation provides that the exemption shall expire when articles so labeled are sold otherwise than to practitioners or on their prescription. Section 301, particularly paragraph (c) and (k), is applicable to such cases, and you will note, makes the retailer liable to the penalties provided.

It is not the purpose of this Administration to undertake extensive supervision of the activities of retail druggists, since this can be more properly and more adequately done through State regulatory agencies.

This Administration, however, cannot divest itself of the obligation placed upon it by the Federal statute. We have had occasion to advise the drug industry both of our interpretation of these requirements of the Act and of our purpose not to overlook infractions of the statute by failure of the retail druggist to regard the terms of the Act and the regulations thereunder.

Generally speaking, the drugs which are labeled with the so-called prescription legend are those which are particularly potent or which may be a menace to health when used for self-medication. A typical list of such drugs would include barbiturates, cinchophen, neocinchophen, other cinchophen derivatives, cantharides (for internal use), aminopyrine, sulfanilamide, sulfapyridine, sulfathiazole, thyroid, aconite, benzedrine sulfate (for internal administration), chrysarobin or goa powder, chrysophanic acid, colochicine, colchicum, emetine, phosphides, phosphorus, radium, thiocyanates, the anthelmintic drugs, carbon tetrachloride, tetrachlorethylene, male fern (aspidium), santonin, wormseed oil (chenopodium oil), thymol.

#### THE ANNUAL MEETING

The Annual Meeting has been definitely set for September 29-October 3, inclusive. The Association has been very fortunate in securing such a desirable date. At that season of the year the warm weather has usually passed and cool days make it an ideal time for the meeting. Although Louisville has become one of the leading convention cities in America and is usually crowded with guests, it happens that the week selected will be free from other conventions and ample hotel facilities will be available.

The Brown Hotel will house all of the activities of the Association, including the House of Delegates, the scientific assembly, the technical and scientific exhibits.

The Chairman of the Program Committee is open to suggestions for subjects and speakers. Any member who has not been on the program for two years and wishes to present a paper is asked to write immediately J. H. Pritchett, Louisville. W. O. Johnson, Louisville, is sponsoring the scientific exhibits and will provide ample space for this valuable asset of the Association.

Pay your dues now so that you can without interruption receive all the JOURNALS with annual meeting news.

## ORIGINAL ARTICLES

WHY OUR PROFESSION SOUGHT A  
PREMARITAL LAW

A. T. McCORMACK, M. D.

Louisville

The profession sought the law with the approval of organized medicine everywhere because we are seeking to find all the cases of curable disease that can be found and brought to professional care at the earliest possible moment.

This law is one of the most important things sought by the profession. If we can find the cases of syphilis in our young people and can promptly bring them the necessary treatment we can reduce the incidence of syphilis and eventually eliminate it, as was done in Norway, Sweden and Denmark.

We are now prepared to administer the law. I want to say to you, as members of the greatest profession there is, that the fine cooperation of our friends in the clinical laboratories is one of the most delightful experiences I have ever had. We like to change the styles a little—with women's styles that is alright, but with laboratories it is not good. They must be standardized carefully and changes should be made by those able to devise standards. Poor antigens mean difficulty. With those approved today we will have a group of laboratories in Kentucky that will make one available in each doctor's own general neighborhood. We are able to say to you the laboratories will cooperate just as far as possible.

The cost of making twenty-five tests is not greater than the cost of making one test. These tests can be made very rapidly, and if the result is found to be negative, the license can be released with a minimum of delay.

This new law is entirely in the hands of the practising physicians of the state, whether it will be a success or failure. Two per cent of the patients will be found to be infected and they will be found before they subject the innocent partner to infection and before they attempt to have children.

The other speakers will speak about the details. I just want to express my appreciation of the interest of the profession throughout the state, and particularly the fine cooperation of the laboratories, our consultants who helped to draw up every

single regulation for diagnosis and treatment, all of which has been done by practising clinicians in Kentucky. The complete record will be before you and every doctor in the state. We have the opportunity to free Kentucky and every Kentuckian of syphilis—not done before in any state of the Union.

THE OPERATION OF THE PREMARI-  
TAL LAW IN THE PHYSICIAN'S  
OFFICE

FRED W. CAUDILL, M. D.

Louisville

The Kentucky Premarital law will become effective January 1, 1941. Its purpose is to prevent the spread of syphilis through marriage. How well this purpose will be accomplished depends upon the thoroughness of the physicians in making the medical examinations required by law. The vast majority of people applying for marriage licenses are between 15 and 30 years of age. This is the age group in which syphilis is more frequently contracted. Hence, most of the cases of syphilis that will be found in marriage license applicants will be early cases and, therefore, highly communicable. The premarital law opens up a new avenue for successfully discovering and handling these cases. By finding and adequately treating syphilis infection in these young people, we prevent the spread of syphilis through marriage, lessen the chances of diseased offspring, and, at the same time give the infected persons better chances of permanent cures than if their infections had been found in later life.

It is, of course, as yet too early to do more than guess as to how many marriage license applicants showing evidence of syphilis infection will be brought to light by the operation of this law. It is interesting to observe, however, that of a total of 18,759 blood specimens from pregnant women, examined in public health and private laboratories between June 12, 1940, when the prenatal law went into effect, and November 22, 1940, 1.9 per cent have been positive. This means a rate of serology positivity of 19 per 1,000 specimens. Interpreted in terms of a year's experience in this State, in which about 60,000 children are born annually, this would mean that, due to the operation of the prenatal law alone, approximately 1,100 wo-



men who show serological evidence of syphilis infection will be found in a twelve months period.

It is felt not unreasonable to assume that the prevalence of syphilis in marriage license applicants will not be less than it is in pregnant women. If this be true, it is reasonable to expect that the operation of the premarital law will disclose serological evidence of syphilis in 1,900 to 2,000 of the 100,000 persons who apply for marriage license in Kentucky annually.

The Premarital Law places upon the examining physician responsibility for making the diagnosis of syphilis in marriage license applicants. When an applicant for marriage license comes to a physician for a medical certificate upon which to obtain such license, the physician must take a complete history, make a thorough physical examination, draw a specimen of blood for serological test and send such specimen to a laboratory approved for such tests. The physician should keep a record of his findings for future reference in case there should arise in the future any question as to the correctness of the diagnosis. For the convenience of the examining physician, there is attached to the medical certificate an examination record form which may be used. In taking the history, the examining physician should seek to bring out whether or not the applicant has ever been infected with syphilis. He should ascertain whether the applicant has ever had a suggestive sore on the genitals, lips, or in the mouth; an eruption, painful joints, persistent headaches, or persistent sore throat. He should also inquire whether the applicant has had, in the past, a blood test with subsequent treatment for syphilis. The two essential points to be established by the history are: (1) Does the applicant know whether or not he has contracted syphilis in the past or, if not, has inquiry established that he has in the past suffered suspicious symptoms of the disease? (2) If it is established that the applicant has contracted syphilis in the past, the approximate date of onset, if possible, should be determined, together with the kind and duration of treatment, if any, that was administered.

To make a thorough physical examination the applicant should, of course, be so draped that every part of the body can be thoroughly inspected. The genitals should be carefully examined for lesions or suspicious scars; the skin should be studied, under a good light, for eruptions, the scalp should be examined for patchy alopecia

and the mucous membranes should be inspected for mucous patches. Whenever a genital or other moist lesion is present a Darkfield examination must be made.

When the examining physician receives the confidential report from the approved laboratory which has examined the specimen submitted, he combines this with the history of the applicant and the physical findings to establish his diagnosis. If the blood test is negative and there is no other evidence of syphilis, the physician must complete a certificate and give it to the applicant. If, on the other hand, a diagnosis of syphilis is made which, in the opinion of the examining physician, is communicable, the certificate must be withheld; the case must be immediately reported to the health department of the county or city in which the applicant resides and the applicant advised to begin treatment at once. The minimal treatment required by the State Board of Health Rules and Regulations, in case the patient can take such treatment, is twenty arsenicals and twenty bismuth injections given according to a continuous plan. This is the amount of treatment which the leading syphilologists in this country consider the least required to render syphilis infection non-communicable and to prevent an infectious relapse. Of course, more treatment than this is necessary to cure the majority of cases.

Naturally, cases varying more or less widely from the ordinary will present themselves. For instance an applicant may have had the minimal amount of treatment and still have a positive blood test; the applicant may have been treated inadequately or irregularly; the applicant may have cardiovascular or neurosyphilis and so require special treatment; the applicant may have a condition which makes it unwise to give routine treatment or any treatment; or the applicant may have congenital syphilis. All such cases are problem cases and are so specified in the State Board of Health Regulations governing the control of syphilis. Nevertheless, the question of communicability must be determined, as nearly as possible, in each and every such case to the end that both the interest of the patient and the interest of the public may be properly protected. With this objective in view, the Regulations of the State Board of Health provide that the question of communicability shall be determined by consultation between the examining physician and a representative of the State Board of Health or the

health officer of the city or county in which the applicant resides. Such consultation serves not only to protect the interest of both the individual and the public, but to fortify the position of the examining physician in the event the correctness of the diagnosis should, at any time in the future, be brought into question.

Stated briefly, the law requires that the examining physician give the applicant a medical certificate for marriage license if no evidence of the existence of syphilis is found. Where evidence of syphilis is found and the case is early or uncomplicated, the certificate must be withheld and the applicant must receive at least 20 doses of an appropriate arsenical and 20 doses of an appropriate heavy metal. In problem cases, as classified above, the certificate must be withheld until the question of communicability has been determined by consultation between the examining physician and the proper health official.

In certain circumstances, the court may order the county court clerk to issue a marriage license without a medical certificate. For example, a court order for marriage license will be given to an applicant after a hearing, based on medical testimony, has established (1) that the female applicant is pregnant and marriage is necessary to confer legitimacy on her unborn child; (2) that the applicant has syphilis in a stage not communicable nor likely to become communicable; (3) that the applicant does not have syphilis in any stage.

The question of what would be a fair charge for the examining physician has arisen. This, of course, is a matter for the individual physician to determine, depending upon his own fee schedule and what he thinks, based on the economic situation of the applicant, would be reasonable.

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For my part I am still unconvinced that the family doctor is an anachronism. I still want somebody to save me from unsuitable or excessive specialist advice; I need someone to coordinate the findings of specialists and discount them if necessary; and above all I want someone who is willing to talk to me, at length, about my migraine, my little boy's delinquencies, my wife's recent strangeness, my baby's inoculation, and my daughter's desire to marry a man with asthma. *Lancet*. Copied by the New York State Jour. of Med., January, 1940.

## THE LABORATORY IN RELATION TO THE PREMARITAL LAW

L. H. SOUTH, M. D.

Louisville

The 1941 Premarital Act states in Section 2105a-1b: In order to obtain a medical certificate, as required by this Act, each such medical examination shall include a complete history, and such physical examination as will reveal any existing clinical evidence of a syphilis infection, and laboratory test or tests. All laboratory tests required by this Act shall be made by a laboratory which is approved by the State Commissioner of Health of Kentucky, or by the laboratory of the State Department of Health. Such laboratory test or tests as may be made by the State Department of Health shall be made free of charge. Laboratory tests shall include a Kahn diagnostic test for syphilis, or some other serological test for syphilis approved by the State Commissioner of Health of Kentucky.

The State Department of Health in agreement with the U. S. Public Health Service, approves of five tests, The Hinton, Eagle, Kline, Kahn and Kolmer Modification of the Wassermann. I shall not discuss the technique, merits or demerits of these tests or their relative sensitivity, (freedom from false negatives), or their specificity, (freedom from false positives). All this data can be secured in the June number of the 1940 Venereal Disease Information and the Technics of Serodiagnostic Tests for Syphilis, June 1940 Supplement. This medical journal of venereal disease has been highly recommended by leaders in all fields of public health. In a rapidly developing and changing field of medicine, the physician interested in venereal disease control from the standpoint of differential diagnosis and treatment will find Venereal Disease Information an important aid. It is published monthly by the U. S. Public Health Service. Today it ranks as the Government's "best seller," with the highest paid circulation of any Federal publication. It is available at 50c per year to all physicians.

The State Commissioner of Health has adopted the Kahn test only because it is

- (1) accurate
- (2) practical
- (3) lends itself to mass production
- (4) has been adopted by the League of Nations



- (5) less personal equation in reading its results
- (6) expenses less
- (7) no modification since it was given to the public in 1924.

Almost every laboratory in the past had a modification of their own serodiagnostic tests for syphilis. Authors of the various tests found too much variation in laboratories performing their test. To insure a more complete uniformity in all states having a Premarital Law and to standardize these tests, in 1938 the United States Public Health Service called a conference with State Laboratory Directors, serologists from municipal and private laboratories, at Hot Springs, Arkansas. Drs. Hinton, Eagles, Kline, Kahn and Kolmer attended this meeting. Syphilologists as Dr. Moore, of Johns Hopkins, Dr. Stokes, of Mayo Clinic, and other well known authorities, were also present. A committee was formed to evaluate the serodiagnostic tests for syphilis for approving state laboratories. This procedure consisted of examining blood from 100 known syphilitics with complete history, and blood from 100 normals with their complete history; a sample of each blood was sent to the State Laboratory desiring approval. The five recognized tests, Hinton, Eagle, Kahn, Kline and Kolmer were made on each specimen and your grades were made on the test that your laboratory preferred, and each author agreed to act as consultant. An error of 1 per cent in specificity (freedom from false positives), and an error of 10 per cent in sensitivity (freedom from false negatives), was permitted. Thirty-two State Boards of Health participated in appraisal. Kentucky received for the Kahn test 100 per cent in specificity (freedom from false positives), and 76.7 in sensitivity (freedom from false negatives). The standard was 71.2. The State Department of Health laboratories are tested each week by the United States Public Health Service with ten specimens from known syphilitic and normal donors. This same high standard has been maintained.

To approve private laboratories in Kentucky for the Premarital Law, the same procedure was followed. A letter was written to every physician, hospital, private laboratory inviting them to be approved according to the rules committee on the Evaluation of the Serodiagnostic Tests for Syphilis of the United States Public Health Service. The laboratories of the Service and the Kahn laboratories in Michigan were

consultants in this approval. Only the application of those laboratories under the supervision of a physician were accepted for the approval test. It is the laboratories, not the technicians, that are approved. At the first evaluation, 14 laboratories were approved.

After the Prenatal Law went into effect in June, and as the Premarital Law approaches, more private laboratories made requests for approval. It was decided to again proceed with another evaluation, this time again writing personally to each physician, hospital and laboratory that no future evaluation would be made until January 1, 1942 because of the expense involved, and this was their last chance. Fifty-seven laboratories have been approved.

Before beginning the last approval, a Refresher Course in the Kahn Test was offered in the laboratory of the State Department of Health free to all technicians, referred by a physician who desired approval.

A supply of known positive and negative serum for control was sent to each laboratory. A minimum of equipment required a water bath, Kahn pipettes, rubber racks, Kahn tubes and most important a fluorescent reading lamp, at an approximate cost of \$50.00 and Dr. J. R. Pate, the Director of this work, personally visited these laboratories and inspected their equipment and if their reports showed any signs of lack of specificity (freedom from false positives), or sensitivity (freedom from false negatives), another visit was made and the causes of the variation in the test were remedied, and the physician in charge was requested to send the technician to the State Department of Health laboratories for a review of the technic.

A complete list of these approved laboratories with an epitome of the marriage law and the list of states requiring a Premarital Test has been published in the January JOURNAL. The State Commissioner of Health urges every physician to keep on his desk this issue of the JOURNAL and to use the privately approved laboratories when possible, for these laboratories have worked unceasingly for their approval and have passed a very rigid test, and will be constantly inspected to insure you as accurate a report that is possible to obtain. Use these laboratories if you are in a hurry for it will require a maximum of five or six days depending upon the time of the work the specimen arrives, and the load of work the laboratory has at that time,

It will be of interest at the present time to review the work of the State Laboratory in the Kahn test and the following report covers the work from the beginning in June 1938 to January 1941.

Positives .....	31,660
Negatives .....	233,192
Doubtful .....	4,640
Insufficient .....	1,814
Broken .....	5,506
Hemolysis .....	9,798
Total .....	286,610

There is an average of 62,000 births in Kentucky each year. This necessitates 62,000 prenatal tests. There was an average of 52,000 marriages, according to a five year survey made by Dr. J. R. Pate. This means 104,000 tests each year. With 25,000 draftees 1941 will have an increased load of 175,000 to 200,000 tests, and with the normal load of 100,000 makes a total of 300,000 specimens a year, 1,000 to 1,500 a day. To keep complete available records, it requires four forms of cards to alphabetize and codify each report, and four different sets of files for reference. This summary gives some idea of the vast amount of work in the central laboratory. It should always be borne in mind that a test tube never replaces a thorough physical examination and complete history, and should never be considered as a diagnosis. They are adjuncts and aids.

1. Hemolysis is the rupture of red blood cases of hemolysis. This condition can be prevented by observing the following simple rules.

1. Hemolysis is the rupture of red blood cells causing dispersion of hemoglobin in the blood serum. It interferes with the performance of blood tests.

2. Blood specimen should not be drawn for two hours after a meal.

3. Be sure syringe and needle are clean, sterile and thoroughly dry. Water in the needle and syringe causes hemolysis.

4. Do not force blood from syringe into tube. Remove the needle and allow blood to flow gently into the tube.

5. After taking the specimen allow it to stand, without agitation, for at least one-half hour or until a clot forms.

6. Fill out forms completely and plainly to expedite report.

The 5,506 broken specimens usually occur in the mail. There is no way to avoid this because of the rough handling of packages in the post office. If your package happens to be the one on the bottom, several of the

containers will be broken; they are not broken in the laboratory. All doubtful cases should be re-checked and the history taken into consideration for the diagnosis.

Through the foresight of the Health Commissioner, the laboratory is fully prepared for the warfare against syphilis. There are no bottle necks. The reports are accurate. We work for accuracy, not speed. You can be likened to a Fifth Columnist in this war on syphilis if you send in an unfit specimen, the history card not filled out, name illegible, and do not use the knowledge given you in preventing hemolysis, directions of which are in each container, and with the help of each one of us acting in a spirit of cooperation, this work will be one of the greatest boons to humanity and if the new pension law for Judges is upheld, because of their benefits to future generations, I can safely say all the gold in Fort Knox would not be adequate to pay for the services our doctors will give to our future generations in the warfare against syphilis.

#### THE CLINICAL ASPECTS OF THE PRE-MARITAL LAW

WINSTON U. RUTLEDGE, M. D.

Louisville

You have just heard the addresses of the three previous speakers on the laboratory mechanics of this problem of establishing the presence or absence of a syphilitic infection in a given individual applying for a marriage license. There are additional problems confronting the examining physicians who are required to prove the presence or absence of such an infection. These physicians bear the brunt of the whole burden.

The cases that show primary or secondary manifestations of syphilis are easy to diagnose. It is hardly necessary in those cases to confirm the diagnosis by serologic tests. On the other hand, it is the individuals who show no obvious clinical manifestation of syphilis infection who present the greatest difficulty. Of course, the history obtained from such individuals is notoriously unreliable as it has been conservatively estimated that at least 50 per cent of all syphilitic individuals have no knowledge of when they contracted the disease. It is in this large group that the problem is most difficult, and it is up to the examining physician to establish or



disprove the presence of an active syphilitic infection. That is the major big problem because as I have said, in the first place, the history is often unreliable, and, in the second place, many physicians who are chosen to make such physical examination cannot always determine from their physical findings whether or not syphilis is present in an infectious state. In fact, most physicians without special training are not qualified to make such a diagnosis.

The establishment of such a diagnosis must, however, depend largely on physical findings since serologic tests are not 100 per cent reliable as you may have infectious syphilitics with negative serology or, on the other hand, cases that present a positive test with no clinical manifestation. These latter patients are often not infectious. The question has already arisen whether a single positive serologic test in the absence of confirmatory clinical evidence is a justifiable reason for withholding a marriage license in many of this group of cases.

I have been following latent syphilitic cases for years at the City Hospital. Several years ago when we tested patients' blood by only the Wassermann test, we frequently got negative reactions on many of those supposedly adequately treated cases that, since we have changed to the Kahn test, have again given positive reactions on one or repeated tests. This brings up the question of whether the Kahn test is more reliable than the Wassermann test or not. Dr. South mentioned the specificity of these reactions. I think there is no question that there is a definite difference in the sensitivity and specificity of these two tests. There is a question in my mind whether any one of these tests should not be checked against another equally efficient and established test in all doubtful cases.

As far as the serologic fastness of such cases is concerned, a positive serology (in early cases) usually means a progressing or active syphilitic process in the body, while in long-standing tertiary cases a positive serology often means only a well established immunity, such as is frequently seen in patients following a typhoid or tuberculosis infection.

The laboratory findings may not constitute the final word as to whether a patient is infectious or not, or whether he or she should be given a marriage license or a long course of treatment. As Dr. Caudill stated, in these cases we probably will have many problems to solve which are

still somewhat debatable.

From the therapeutic angle, the State wishes to establish some means of treatment whereby we can be reasonably sure that the highest percentage of infectious patients will receive sufficient treatment to render them permanently non-infectious at its completion, and enable them to safely engage in matrimony. As the result of many statistics and much experience, we have established the fact that all cases with active syphilis should receive a minimum of twenty injections of arsphenamine (preferably the old), and twenty injections of a heavy metal given in continuous series of injections, alternating the courses of arsphenamine and bismuth. These should be given without any rest period between them. It has been shown repeatedly that rest periods are of no value and definitely harmful.

There will be many individuals who will come in with early syphilis who will want to continue their treatment beyond the minimum required amount. These individuals should be given at least ten more arsphenamine and twenty more heavy metal injections, with no rest period between these additional treatments. Such a course of treatment will not only render such patients non-infectious, but will also "permanently arrest" or cure the majority of them.

All pregnant women with physical evidence of syphilis, or who give a history of a syphilitic infection in the past, should be treated throughout the duration of each pregnancy, irrespective of the amount of previous treatment they have received, the duration of their infection, or any manifestation of syphilis they may present at the time they are first seen. We can expect untreated syphilitic mothers to give birth to only about 16 per cent of normal non-infected children while, if treated, throughout each pregnancy, such patients will give birth to 85 per cent to 90 per cent normal healthy infants.

In summary, the chief problem in all of these cases is to clinically as well as serologically establish the presence or absence of an active infection, and then to treat the clinically active cases with that amount of continuous treatment that will render them cured, or more technically speaking, "arrested permanently," so that their infectious potentialities will be reduced to a minimum.

#### DISCUSSION

W. H. Allen: As Dr. McCormack has said, "no medical group is more willing to cooperate in carrying out this law than those of us who

represent the private laboratory." I feel that no one appreciates more fully the value of this law than those of us who have been in laboratory work over a period of years as we have seen whole families infected with syphilis.

With the premarital and prenatal laws in force, I see no reason in the future why a syphilitic baby should be born in the State of Kentucky. For if the bloods of a couple are tested before marriage and the blood of the wife again tested after pregnancy has taken place there seems every reason to feel hereditary syphilis should be wiped out.

Dr. Rutledge has brought out the point that there is often a difference in results of the different serological tests. In our laboratory we are using the Kolmer quantitative, Wassermann and the Kahn precipitation tests and in several cases recently that I have in mind, we have found them to disagree. In following out these cases, in which there was a difference, with further tests, in our laboratory, and sending the blood to other laboratories, that we might compare their results with ours and better determine the accuracy of the two tests, we found the results in other laboratories in keeping with ours, and the specificity of the tests practically the same. However, there is unquestionably a difference occasionally in the results of the two tests, especially in weakly positive reaction, so I have definitely come to the conclusion that we of the private laboratory, especially, should use two tests, one to check the other. I can well see that the State Board of Health or any big institution doing a large number of tests for syphilis, daily, is not in a position to use two tests, but those of us in the private laboratory whose tests are limited should use this double check.

Just today, we had a case in which the reactions were doubtful, so the physician in the case sent a sample of the patient's blood to Dr. South, who also reported a doubtful Kahn so it is still a question whether or not this patient has syphilis. Last week we did a blood test on a girl applying for a position and found the Wassermann negative, and the Kahn positive. Another specimen of blood was requested which gave a slow negative reaction. After a small dose of Salvarsan, the Wassermann became positive, proving the Kahn correct in this case. Other cases of similar disagreement proved the Wassermann correct. So it does seem that a smaller number of weakly positive reactions will be overlooked, if two different tests are used.

There has been some question, it seems, as to what the private laboratory will charge these cases. Dr. Weeter, who was on the program for discussion and unable to get here, talked with me over the telephone a few days ago. We

agreed, and I feel it agreeable with other laboratories, to do these tests as we do others, that is, charge a fee if the parties are able to pay, if not, we will gladly do our part without charge.

## SYPHILIS, ITS MODERN MANAGEMENT

RUSSELL E. TEAGUE, M. D., M. P. H.

Louisville

For thirty-five years, a scientific protocol for the management, control and treatment of syphilis has been sought. Thirty-five years packed with valuable experiences as revealed in the volumes of literature on this subject since the work of Schaudinn and Hoffman in 1905.

Although many experts in syphilology are divided as to preferred methods of treatment, all are in agreement that by the application of modern principles, not only will most cases of syphilis be cured,—the word cure is used reservedly, but the prevalence can be so controlled as to eventually eradicate the disease from this country. At long last, scientific opinion has crystalized in regard to the management of syphilis and presents to the modern physician a more or less definite outline of procedure that has withstood careful study and testing.

It is not the purpose of this paper to cover the entire field of syphilology or syphilotherapy, but to present briefly as possible such an outline based upon the writings of the outstanding syphilographers of today, the studies of the Cooperative Clinical Group, and some opinions from our observations and experiences in a syphilis control clinic in a typical Kentucky community.

Sir William Osler termed syphilis "The greatest killer among the infections." The very nature of the disease, the social processes involved in its transmission, its unusual incidence and prevalence in the population, the long period of time necessary to its proper treatment, all tend to enhance the difficulties and problems of management. Hence syphilis presents one of the most significant and most extensive problems confronting modern medicine.

**EPIDEMIOLOGY AND CONTROL:** Recent studies and surveys by our Public Health Service have shown that one in ten adults acquire syphilis before reaching the age of fifty. Approximately 11,000,000 persons in the United States are infected with the disease, and 1,140,000 persons come

Read before the Kentucky State Medical Association, Lexington, September 16-19, 1940.



under treatment for the first time each year. Of the persons annually seeking treatment, 518,000 have early syphilis and 596,000 have late syphilis. Such figures as these, (though estimates, are accurate and must be taken as fact) have emphasized the importance of control procedures in modern management.

For purposes of controlling the spread of syphilis as well as for proper treatment it is necessary to classify the disease. Since the major efforts in control are centered on early syphilis and syphilis in pregnancy, the old classification of primary, secondary, and tertiary syphilis is not entirely adequate. The following classification is extremely simple and provides an excellent guide in making decisions for management.

Table 1.	
CLASSIFICATION OF SYPHILIS FOR PURPOSE OF MANAGEMENT	
I. EARLY (less than four years duration)	
A. Primary	
1. Sero-negative	
2. Sero-positive	
B. Secondary	
1. Skin eruptions	
2. Mucous membrane involvement	
3. Iritis	
C. Latent	
II. LATE (more than four years duration)	
A. Latent	
B. Active	
1. Gummata	
2. Visceral syphilis	
3. Cardio-vascular syphilis	
4. Neuro-syphilis	

Bearing in mind always that epidemiological measures are directed chiefly at infectious cases, those likely to become infectious, and pregnant syphilitic patients. A study of the community should be made and such local differences as racial, economic, geographical, and age incidence be taken into account in planning a local control program.

In order for a control program to be effective it is certain that it must be an organized one, one in which every physician in the community must participate, combining their efforts, and utilizing every available facility to that end. Local medical societies collaborating with their health officers should take the full responsibility in planning policies and procedures adaptable to their own particular community.

REPORTING: A delinquent syphilitic is

many times a greater hazard to the community than a case of small-pox or diphtheria. In Kentucky syphilis is reportable, but fortunately and properly it is not necessary to report the patient's name, unless the patient stops treatment or otherwise becomes delinquent and a hazard to the public health. Cases may be reported by initial, name, date of birth, or any other identifying mark. This report should include the diagnosis as to stage of infection as given in the above classification. This provides the control officer with an index as to prevalence or effectiveness of control measures, or gives him a lead to the existence of new sources of infection in the community. Any recalcitrant or delinquent patient should be reported by name and address, and the control officer called in consultation to make proper investigation and institute procedures to bring such a person back under treatment. This system of reporting protects the patient that is conscientious and wants to cooperate and get well, and also provides a means of controlling those who do not. No case of syphilis is adequately or properly treated if he is allowed to infect another person.

QUARANTINE: Control regulations provide that delinquent cases may be quarantined in their place of residence. This is used in any case that is infectious or may become infectious and has refused treatment. If such a person should break quarantine, he is then liable to court action. Fortunately this measure is rarely necessary as threat of quarantine often brings the delinquent back to treatment.

INVESTIGATION: It is necessary that the contacts, within and without the family be investigated in the search for the source of infection, or to find other persons the patient may have infected. Many new cases will be brought to light. For example in our clinic in 1939 we investigated the contacts of 390 cases of syphilis from an epidemiological viewpoint, these investigations found 412 other cases, of which 118 were infectious cases, 80 were congenital-syphilitics and the remainder latent. Investigation should continue as follow up after a patient is under treatment until assured that all possible contacts have been seen.

TREATMENT FACILITIES: It has been shown that 65 per cent of the syphilis in the United States is in 30 per cent of the population in 16 Southern States, and that almost half of all the southern syphilitics are in the lowest income group. It is readily apparent that in our part of the country

treatment facilities must be provided to take care of the large number of medically indigent syphilitics, who constitute the greatest menace to the public health. Treating syphilis is an expensive procedure and treatment clinics provided by public funds are necessary for this class of patients. At present the number of clinics is inadequate to reach every community but facilities are growing in number and effectiveness throughout the United States. Policies for conducting the clinics should be worked out by the local medical society, but by and large every effort should be made to confine the cases admitted to public clinics to the indigent cases only.

Laboratory facilities including a dark-field microscope and a good serological test should be available to every community.

**DIAGNOSIS:** Practically 100 per cent of the cases of sero-negative primary syphilis may be cured if diagnosed and treated adequately. The darkfield microscope provides a quick and positive means of making the early diagnosis. In the light of modern management, no chancre or lesion suspected as being primary syphilis should be diagnosed as such and treatment started, until a positive diagnosis is confirmed by the darkfield test or positive serology.

After the blood serology becomes positive the chance of cure has been reduced to 80 per cent. Thus the importance of the very early use of the darkfield test.

Chancroid, lymphopathia venereum, and other conditions clinically present lesions difficult to differentiate from primary syphilis. Frei antigen is often useful in differentiating lymphopathia which must always be borne in mind when diagnosing genital lesions. This disease is also much more prevalent in Kentucky than was previously supposed. We have seen 14 cases in our clinic in the past six months, the most of which were sent in to us for dark-field examination.

Secondary syphilis presents a great variety of clinical pictures, typical skin eruption, atypical conditions, mucous membrane involvement, arthritis, malaise and so on, but diagnosis must be confirmed by history and positive serology.

Early latent and late latent syphilis must be diagnosed by relying on history and serology. 505 cases of syphilis in 1,607 admissions to our clinic in a three year period gave negative history of infection. Serological tests that are positive on asymptomatic persons should always be repeated—a diagnosis of latent syphilis without the history should never be made

on a single serological test. Other conditions may give a positive serological test and should be borne in mind; malaria in the acute stage particularly will give a high incidence of positive tests, measles, leprosy, tuberculosis, yaws, influenza and other febrile conditions may be responsible for a false positive test.

However, a consistently positive serological test in an asymptomatic person must be strongly regarded as syphilis unless proved otherwise. Dr. Reuben Kahn of Michigan reports a differential test in which he is able to detect falsely positive tests that are due to other causes than that of syphilitic reagin in the blood serum. Such a test would prove of material aid in the diagnosis of doubtful cases. Falsely negative serological tests only occur when there is an absence of syphilitic reagin in the blood serum, as in early primary syphilis before the reagin has formed, or in very latent disease, syphilis under treatment, or probably in the presence of an overwhelming syphilis infection, (analogous to the negative tuberculin test found often in the presence of overwhelming tuberculous infection).

Cardiovascular, visceral and gummatous syphilis may be diagnosed clinically with aid of serology. The therapeutic test sometimes must be relied upon in these conditions, however the non-specific action of antisyphilitic drugs on other conditions must be remembered when used.

Neurosyphilis may be present with negative blood serology. Diagnosis is made clinically with aid of spinal fluid serology, cell count, globulin, and colloidal gold tests.

Syphilis in the newborn infant of a syphilitic mother is often very difficult to diagnose. The cord Wassermann or the infant serology at birth is often positive, showing about the same amount of reagin as that of the mother's serum. Since it is desirable to start immediate treatment in those infants that have syphilis, it becomes necessary therefore, to utilize all of the available sources of information in combination, and frequently to make the final decision on the composite picture. Darkfield examination of the scrapings of the umbilical vein may give a positive diagnosis, but is limited to the immediate conditions at birth. X-ray of the long bones at the age of two weeks may show characteristic syphilitic osteochondritis at the epiphyseal lines. This test is reliable if the mother has not had bismuth, and also remembering that a negative x-ray does not exclude syphilis. A quantitative serological



test on the cord blood, and taken on the infant at the 1, 2, 4, 6, 8, and 12th week of life and thereafter every three months for the first 2 years should be made. If the child does not have syphilis the titer of the reagin will decrease and become negative by the sixth week of life usually, and if syphilis is present the titer will steadily rise. Clinical signs of syphilis usually appear by the 8th or 12th week if at all, in untreated infants. The most common signs are rhinitis, snuffles, skin lesions, osteitis, periosteitis, and sometimes lymphadenitis, malnutrition, and occasionally paraplegia as neurosyphilis is not uncommon in the newborn.

**TREATMENT OF EARLY SYPHILIS:** The results obtained in the treatment of syphilis depend largely on the stage of the disease at which treatment was started, the drug or drugs used, and upon scheme of treatment. The earlier in the course of the infection that treatment is instituted the better the outcome. The continuous treatment scheme (without interruption) has been found to be far superior to other methods in the ultimate results obtained. The drugs are given continuously using the trivalent arsenicals, arsphenamine, neoarsphenamine, sulpharsphenamine or mapharsen alternating the course in the overlapping block method with a heavy metal bismuth or mercury.

Old arsphenamine (606) has been found to be the most effective in the arsenical group, and bismuth the most effective of the heavy metals. Disadvantages of old arsphenamine are that it is difficult to neutralize and administer and is relatively more toxic than the newer drugs. These faults have gradually caused its replacement, especially in private practice, with neoarsphenamine and mapharsen. Mapharsen, the lowest in toxicity and the easiest to prepare and administer, in our hands has given as good results as neoarsphenamine with a much lower incidence of drug reactions and toxidermas. In our clinic we have administered over 12,000 doses of mapharsen in the past three years with only one case of arsenical dermatitis as compared to 8 cases that occurred in patients receiving 12,000 doses of neoarsphenamine.

The overlapping block method or scheme of treatment is somewhat more intensive than the alternating block method, that is, the last two doses of arsenical in each course are supplemented with insoluble bismuth. (Bismuth is best given as bis-

muth subsalicylate in oil.) Enough bismuth will have been absorbed by the time the arsenical is discontinued to prevent any relapse of the infection between courses.

Table 2  
OUTCOME IN VARIOUS SCHEMES OF  
EARLY SYPHILIS TREATMENT  
Patients observed 2 years or more.  
(Data Cooperative Clinical Group.)

Type of Treatment	Total Cases Treated	Percentage Satisfactory Clinical Results
		Obtained
Continuous	172	79.7%
Intermittent	595	65.0%
Irregular	546	33.3%

In early syphilis (less than four years duration) the most critical period in the course of the infection is in the first few weeks. Somewhere between the fifth and ninth dose of arsenical is the critical point in the treatment. The dose should be as large as the patient's tolerance will allow and treatment should be regular. At this point the infection will be brought under control, and the remaining treatment should be designed to keep it under control until all treponemes have been destroyed. Also at this period the patient is more prone to reactions from treatment, arsenical sensitivity and otherwise, and should be watched very closely for any signs of drug idiosyncrasy or early toxic signs. It is important that the urine be watched closely and often. Some recommend weekly urine analysis during the entire treatment period.

In early cases that are getting normal response from treatment the serology should be reversed at least by the sixth month. If not reversed by this time the case may be classed as Wassermann fast. Regularity in treatment is important in preventing this occurrence, as shown by the following table.

Table 3.  
WASSERMANN FASTNESS UNDER VARIOUS  
SCHEMES OF TREATMENT IN EARLY  
SYPHILIS  
(Data Cooperative Clinical Group)

Type of Treatment	Total Cases Treated	Percentage Wassermann Fast
Continuous	1,423	11.2%
Intermittent	1,103	37.3%
Irregular	363	69.3%

Wasserman fastness is an indication for a spinal puncture, and in many instances it is an indication of the presence of neurosyphilis. If the spinal fluid is negative, continued treatment is necessary and by changing drugs a reversal may be obtained.

Table 4

		NUMBER OF DOSES																								
BISMUTH		6		8		10		12		14																
ARSENICAL		12		10		8		6		4																
WEEKS																										
MONTHS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
YEARS	1													2												

#### CONTINUOUS ALTERNATING BLOCK SCHEME OF TREATMENT FOR EARLY SYPHILIS

(less than 4 years duration)

Start on arsenicals and alternate with bismuth, 40 doses of arsenical and 60 doses bismuth, over a period of 18 months to two years.

A blood serological test should be taken at the end of each course of bismuth. And every patient should be treated for at least a full year after the first test shows negative.

A spinal test should be made after the second course of arsenical and at dismissal of the patient.

Physical examinations, including urine and blood examinations should be made frequently during course of treatment, to detect toxic conditions, iodiosyncrasia or blood dyscrasia.

The dosage of neoarsphenamine should be .45 gm to .6 gm for women and .6 to .75 gm for men.

The dosage of mapharsen should be .03 to .05 for women and .04 to .06 gm. for men.

The first dose in each course of arsenicals should be one half the full dose.

The dose of bismuth subsalicylate in oil should be 3 grains or .2 gm bismuth subsalicylate in 1 1-2 c. c. dose.

With this type of treatment then, an infectious relapse incidence of less than 2 per cent can be expected. And a large percentage of clinical, biological, and serological cures in cases of syphilis of less than four years duration, depending principally upon the stage of the disease at which treatment was started.

From the standpoint of the control of the spread of syphilis, such a scheme of treatment as described above is very im-

portant. Infectious relapse is quite common in early syphilis and is directly proportional in occurrence to total dosage of arsenicals and continuity of treatment. This is shown readily in the following table.

Table 5.

#### INCIDENCE OF EARLY INFECTIOUS RELAPSE BY TOTAL DOSAGE OF ARSPHENAMINE

(Data Cooperative Clinical Group)

Total Dosage of Arspenamine	Total Cases Treated	Percentage of Incidence of Early Infectious Relapse
9 doses or less	3,863	7.89%
10-19 doses	1,598	4.32%
20-29 doses	754	3.85%
30-29 doses	243	1.23%
40 doses or over	94	1.06%
Total	6,552	6.06%

**TREATMENT OF LATE SYPHILIS:** The chief objective in the treatment of late syphilis (more than 4 years duration) is to arrest clinical progress, many of these cases, however, can be cured depending upon the damage already caused by the disease progress and the type of disease present. From the control standpoint these cases are of little importance except when complicated by pregnancy, the ultimate result of prevention of the serious crippling effects of cardiovascular, visceral, and neurosyphilis, justify the intensive application of treatment in these cases. Moore states that 25 per cent of the cases of untreated syphilis die as a result of the disease, as compared to a 1 per cent mortality from the treatment. This alone justifies efforts in getting these late cases under intensive treatment.

Table 6

	NUMBER OF DOSES																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
BISMUTH										10								10						
ARSENICAL																								
WEEKS																								
MONTHS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
YEARS																								

#### CONTINUOUS ALTERNATING BLOCK SCHEME OF TREATMENT FOR LATE SYPHILIS

(more than 4 years duration)

Start on Bismuth and alternate with Arsenical, Iodides given empirically with the heavy metal. Treat for two years or more and observe thereafter.



The person with late syphilis differs from the case of early syphilis, in that he is a few years older and more apt to have complicating conditions, which in themselves may shorten life, modify the course of the infection or alter their tolerance to anti-syphilitic drugs.

In the case of late syphilis the treatment must be modified to fit the individual and meet his needs, more often than the case in early syphilis.

Always start with heavy metals before instituting arsenicals, and examine cardiovascular system particularly often, to avoid therapeutic paradox.

Rest periods of 8 to 10 weeks may be allowed after the first year of continuous treatment.

Wassermann fastness is much more common in late than in early syphilis and the possibility of neurosyphilis must be taken into account more often. Thirty per cent of these cases untreated have neurosyphilis.

Mercury as inunctions and iodides as potassium iodide may be given in these cases as an adjunct to fill out rest periods.

The treatment of cardiovascular, visceral and neurosyphilis will not be discussed here, except to point out their specialized type of treatment. Neurosyphilis may be treated successfully with fever therapy, particularly used in paresis. Tryparsamide is used successfully in all early neurosyphilis. In tabes the danger of eye complications with its use must be kept in mind, however after the eighth or tenth dose of tryparsamide eye complications are rare.

**TREATMENT OF SYPHILIS COMPLICATED BY PREGNANCY:** Every expectant mother should have a serological test, before her fifth month of pregnancy. Every pregnant woman who has ever had syphilis regardless of the present status of the disease should be treated.

Of 1,000,000 potential mothers in the United States who have syphilis, each year there are born 60,000 live syphilitic children and 25,000 others die before birth.

Treatment during pregnancy is for the child, not the mother, she may be treated after delivery. It is aimed at prevention of the child becoming infected, and, if infected, to cure. It must be intensive and continuous, always start with an arsenical and the last 8 to 10 treatments before delivery should be an arsenical.

Without treatment of the syphilitic pregnant woman, the chances that the child will either be dead or syphilitic are

6 to 1. With treatment started before the 5th month of pregnancy the child has a 95 per cent chance of being non-syphilitic.

Regardless of how late in pregnancy syphilis is discovered, always give some treatment, as even little treatment is of some benefit to the child. This is the only instance in which a small amount of treatment for syphilis is of value. Every dose given the mother, of an anti-syphilitic drug, may mean five or six less that will be necessary for the child to take.

Always give maximum doses as the mother tolerates treatment well, (particularly arsenicals).

The child is not harmed by heavy dosage. Watch mother's blood pressure, urine and sclerae as usual, but give no rest periods.

Always start prenatal cases on arsenic and end treatments with arsenic, alternating courses with bismuth. The number of treatments a patient receives depend upon the time of discovery of the infection during the pregnancy. An important fact to remember is that in the last eight to ten weeks before delivery an arsenical should be used.

**TREATMENT OF CONGENITAL SYPHILIS:** In general the treatment of congenital syphilis is exactly the same as that used in adults with the obviously necessary modifications which are dictated by the difference in size of the patient. Intravenous treatment is often difficult, though the jugular vein may be used successfully. Sulpharsphenamine may be used intramuscularly in these small patients alternating with bismuth in a similar manner as in the adult.

Beginning of treatment early in life, (as early as diagnosed) gives a much better chance of cure, as in adult acquired syphilis. Under two years of life stovarsol may be used successfully, given by mouth.

The dosage for infants should be figured by weight. Neoarsphenamine and sulpharsphenamine being 10 to 16 milligrams per kilogram body weight, and mapharsen .5 to 1.0 mgm per kilogram body weight. Bismuth is best given as subsalicylate in oil in the dose of .002 grams per kilogram of body weight.

Late congenital syphilis as in late acquired syphilis presents similar problems and complications. Spinal fluid studies should be done in all cases, as neurosyphilis is not uncommon. Tryparsamide may be used in congenital neurosyphilis as in acquired neurosyphilis.

Children tolerate anti-syphilitic therapy better than adults but they have similar

reactions and idiosyncrasies to treatment and individualize their treatment where possible. Very sick infants with congenital syphilis may not tolerate treatment well and should be started on bismuth before arsenical therapy is begun.

#### SUMMARY AND CONCLUSIONS

(1) Syphilis is one of the gravest and most extensive communicable disease problems confronting modern medicine.

(2) Modern management of syphilis should include an organized control program in every community, system of reporting, epidemiological investigation and follow-up, control officers with power of handling delinquent cases, and provisions for treatment facilities for every case of syphilis found in a community wide case-finding program. Such programs should include premarital and prenatal serological tests.

(3) Syphilis is classified into early syphilis (less than four years) and late syphilis (more than four years duration) for purposes of management, both as to control measures and as to treatment.

(4) For proper management, diagnostic tests should be available to each community, including darkfield microscope test and a good serological test. Emphasis is placed on a positive laboratory confirmation in diagnosis of primary syphilis before treatment is started. Other diagnostic problems are discussed.

(5) A scheme for treatment of early syphilis by the continuous alternating and overlapping method is presented, showing advantages, and discussion of Wassermann fast cases, and incidence of infectious relapse as a problem in control.

(6) A scheme for treatment of late syphilis by the alternating continuous overlapping method is presented, with emphasis on complications and advanced syphilitic pathology.

(7) Discussion of syphilis in pregnancy is given with a scheme for treatment by the continuous alternating method.

(8) Congenital syphilis is discussed, and treatment and dosage of drugs calculated by weight of patient.

(9) Modern management of syphilis then includes the gross problem and the individual problem. A coordinated program for control of the transmission, and a treatment for the individual which assures the cooperative patient an excellent chance for a serological, biological and clinical cure.

#### DISCUSSION

**John Lewis**, Louisville: During the short time that I have been in Kentucky I have discovered that there is no state in the United States that handles its syphilis problem any better than the State of Kentucky and there are mighty few that handle it as well.

Dr. Teague in his paper has covered the essential points so well that there are very few additional that I can add. I should like to say that we should always be suspicious of the presence of syphilis, in cases of gonorrhea. Very often the beginning of syphilis is overlooked in the treatment of gonorrhea. The incubation period of syphilis varies from approximately ten days to ninety days, and the average is about three weeks; that of gonorrhea is about three to nine days, so that if we treat gonorrhea and terminate the treatment at two or three weeks or perhaps a month, we will very often overlook syphilis. It becomes necessary to have a patient who has been treated for gonorrhea come back for examination at periodic intervals, and at these times he should be observed closely to see if there are any skin lesions, mucous membrane lesions, and of course a blood test made. His final examination should be no sooner than at the end of three months from the time of the last exposure, so that infection with syphilis will not be overlooked.

**I. F. Kanner**, Lexington: What is Dr. Teague's treatment for patients unable to tolerate any form of arsenicals? They receive neoarsphenamine, mapharsen, and finally bismarsen, and still have reactions and are unable to tolerate them. I should like to know what his treatment is and what his chance of cure is in those cases.

**Russell E. Teague**, (in closing): I purposely did not talk much about drugs or drug reactions because of lack of time; however, there are a number of problems in the management of syphilis in which these things are directly concerned.

You will note that I had overlapping, in these charts showing continuous treatment, on the last two doses of arsenical with bismuth. The reason we overlap is because we are using an insoluble bismuth. It is preferable to use this because it has a higher heavy metal content, and insoluble bismuth will get better results in the continuous type of treatment if you overlap. However, if you stop an arsenical, say, on the twelfth week and the patient gets no bismuth until the next week and doesn't get another dose until the following week, there is probably a week in the interim that he gets very little drug at all because of the slow solubility of bismuth salicylate and the insoluble drugs.

That brings out a point in the question the Doctor asked me about intolerance. Just a few



days ago we had a case of arsenical dermatitis, early toxiderma, a rash around the elbows and back of the neck, with extreme itching. It was on the eighth dose of arsenic, or right in the most critical period of our whole treatment, between the fifth and tenth doses. The question was what to do with that patient. Of course, we put her on bismuth. The point is, what kind of bismuth to use. We don't want to use an insoluble bismuth, she is in the infectious stage and is apt to have a relapse if she goes a week without some medication. She is put on soluble bismuth in that case and continued on soluble bismuth if she can get to the clinic twice or three times a week. Cases that can only come to the clinic weekly, of course, have to be eventually switched to insoluble bismuth.

Differential diagnoses in types of toxidermas have to be made before you can make any sort of prognosis as to the outcome of the patient. If it is an early dermatitis, the kind where there is slight itching of the skin, or slight redness, fixed exanthema, or Herxheimer's, or any of those early signs of intolerance, they may continue to be treated with arsenical drugs if the patient is watched very closely; starting out with very minute doses and gradually testing out the tolerance before you continue to give the average dose again.

Cases of exfoliative dermatitis and beginning dermatitis with extreme itching and redness should be watched very closely and should never be given another dose of arsenical. In those cases, the slightest dose will cause a full-blown exfoliative type of dermatitis, and the patient will have to be continued on bismuth, iodides, or any of the other available means. The chance of cure is good if they can be kept on treatment.

The French clinicians have demonstrated very clearly that cases can be treated on bismuth alone with a high percentage of serological and clinical cures. I think that bismuth is, next to arsenicals, the outstanding drug and should be used just as our arsenicals are used. In cases where we can't use arsenicals, treatment alone with bismuth and iodide and with the use of some mercury gives a good chance of cure.

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Dogs may be infected under natural conditions with tubercle bacilli of the human and bovine types. A post-mortem study of 543 dogs showed an infection rate of 4.6 per cent. The bacilli were of the human type in 18 out of 22 cases which were examined bacteriologically. R. Lovell, M. D. and E. G. White, M. D., Brit. Jour. of Tub., July-October, 1940.

## THE USE OF GOLD IN THE TREATMENT OF ARTHRITIS

ARTHUR CLAYTON McCARTY, M. D.

Louisville

"All that glitters is not gold." Also, all that's arthritis, is not cured by gold. But the proper use of this old therapeutic agent, in modern dress, has reflected new light on the treatment of a difficult and distressing disease. This morning, I wish to bear testimony to that fact.

HISTORY: Many are familiar with the place gold held in ancient pharmacy, especially as an elixir. Others of you recall that Paracelsus added mercury to Gold and called it the Elixir of Life. Koch realized the value of chrysotherapy circa 1890, but it remained for Mollgaard of Copenhagen to give a real impetus to the practical use of Gold in tuberculosis. This was in 1924 and was soon followed by similar favorable reports from Secher of the same city and Feldt of Germany.

Because of the feeling that Lupus Erythematosus was of tuberculous origin, gold was used shortly thereafter for this and other dermatological conditions, including psoriasis, leprosy and eczema.

Realizing that the properties of gold (bacteriocidal and stimulating) which made it valuable in tuberculosis and skin conditions, would benefit arthritis, Jacques Forestier seems to have reported the first extensive use of chrysotherapy in joint diseases. In 1934 and '35, he lectured on these findings in France and America. Soon, further favorable reports emanated from England and Scotland (Hartfall, Garland, Goldie, Crosby, Pemberton, Baker, Buckley, Copeman, Collins, Davidson, Slot, Deville, Douthwaite, Tegner, Holmes, et. al) as well as from Germany (Feldt, Zimmer and Umber), and from other continental workers. Medical men on this side of the Atlantic seemed more impressed with the dangers of gold therapy than by its virtues. Gradually, however, there has been a considerable change of heart (Phillips, Oren, Snyder, Saskin, Tarsy, Cecil, et. al). Also, one might mention, Hench and Pemberton of the American Committee for the Study of Rheumatic Diseases, and many of our own Southerners like Drs. J. A. Key of St. Louis and Ephraim Goldfain of Oklahoma City.

CHEMICALS: Allow me to completely con-

fuse and confound you by mentioning the golden array of chemicals used by these pioneers. Parmanil (Methyl glucamide of auro-thio-diglycollic acid); Sanochrysin (Gold Sodium thio sulphate); Myoral; Aurocein (Sulphydryl auro naphthyl trisulpho-carbonum); Myochrysin (Sodium aurothiomalate); Allochrysin, (Sodium aurothiopropanol sulfonate); Crysalbine; (also sodium aurothiosulphate); Solganal B in oil (Aurothioglucose); Kryslogon etc; etc. Is it any wonder that the human body reacted unfavorably at times to such chemical linguistic monstrosities? Simplicity prevails today, with Sanochrysin or Myochrysin most popularly used.

**MODE OF ACTION:** What then is the mode of action of these unspeakable chemicals on the unsuspecting or sometimes suspecting arthritic? At least four approaches seem well enough grounded to safely suspend this long and not too secure span of reason. First, there is that old stand-by, namely "shock" on non-specific protein action. But certainly gold is more than that. Kime has added a second explanation in his work with gold in tuberculosis. He depicts an increased sensitization of the leucocyte so that it will more readily engulf or phagocytize the tubercle bacillus and other micro-organisms. Schroder has pointed out the stimulating effect of gold salts on the reticulo-endothelial cells, so important in joint pathology. Schlossberger has added a fourth mode of action from his observations, namely an influence of chrysotherapy on the histocyte of connective tissue producing a cicatrix. There is experimental work on rabbits which shows gold stored in connective tissue, best seen in the Kupffer cells of the liver, in the spleen and lung. Finally, the desensitizing action of gold salts, may be closely linked to the non-specific protein effect mentioned first.

**ADMINISTRATION AND DOSAGE:** While some have used gold salts rather extensively intramuscularly, the present method of general choice is the intravenous route. Personally, I have used intramuscular therapy only in the few cases where veins were inaccessible. The patient receiving chrysotherapy should be at rest wherever possible and responds best if hospitalized.

The amount of gold given to any one patient must vary somewhat according to the product used, and the response of the individual. It is a rather universal practice to give the injections bi-weekly until

1 to 2.5 grams has been administered. Following this, a rest period of from 3 to 8 weeks is permitted, when the course of injections is repeated. A series of three administrations thus will give the patient 3 to 7 grams of gold. Most of my patients have shown satisfactory results on less than 3 grams and in only two have I exceeded this total amount.

First doses should be given cautiously, administering no more than 5 to 10 milligrams. While reactions may take place anytime during treatment, most of mine have been observed early in the series. Maximum individual doses should be 100 milligrams and in a large percentage of cases lesser amounts are adequate and safer. In most women, I use an amount equal to one-half or two-thirds the male dose. In other words, I average 50 mgm. for men and 25 mgm. for women, twice weekly for 10 to 12 weeks.

**REACTIONS AND THEIR TREATMENTS:** Reactions to this form of therapy have been numerous and severe. Indeed, many have refused to utilize this valuable form of arthritic treatment because of its dangers, and rightly so. On the other hand chrysotherapy has been credited unjustly with everything which has gone wrong in a patient for years after its administration. Also, many bad results have followed the unskilled, unwarranted, and careless use of the drug. The same may be said for the arsenicals in spirochetal therapy, but the drug has not been discarded on this account. In treating well over one hundred patients with gold during the past 18 months, I have experienced no serious reactions and have found it necessary to discontinue the drug in only ten individuals.

Reactions may be local, focal, or general. Local reactions are reasonably annoying at the site of the intramuscular injections, and considerably more about intravenous gold, which escapes the vessel. This may be a slough or painful neuritis up the arm.

Focal reactions give enlarged, swollen, red, tender joints following intravenous injections, at times. This is not a frequent or serious condition, and warrants only the suspension of therapy temporarily, rest, heat and salicylates—possible sodium thio sulphate or calcium gluconate intravenously.

General reactions may be almost anything, according to reports, but the most frequently encountered are seen in the skin, kidney, blood, and intestinal tract



(including the liver). Various rashes, swelling, eczema, exfoliative dermatitis, purpura, anemia, leukemia, agranulocytosis, nephritis, jaundice, enterocolitis, etcetera, etcetera, have been reported. Toxic and biotropic types of reactions are described. Most of ours have been of an allergic nature, seemingly, but toxic responses have been encountered also. Prophylaxis in the way of careful blood and kidney studies (before and during treatment) and the use of conservative amounts of gold will go a long way towards reducing unpleasant and dangerous reactions.

The active treatment of reactions and complications consist of stopping the drug; the use of Vitamin A, B and C in generous amounts; liver extracts, calcium gluconate, and sodium thio sulphate by injection, and blood (by transfusion or auto transfusion); as well as symptomatic remedial measures. Mild transient reactions, following an injection of gold in a matter of minutes or hours, we find controlled best by giving injections to the patient lying down; insisting on a protracted rest period thereafter and giving a 5 grain salicylate tablet while so resting.

**RESULTS AND OBSERVATIONS:** Without boring you with statistics, let me state that in atrophic rheumatoid arthritis 78 per cent (28 of 36 patients) were temporarily "cured" or definitely benefitted. (As in tuberculosis, nephritis and diabetes, I prefer the term "arrested" to "cured," and so tell my patients. I believe that they should realize the chronicity of their affliction, and the possibility or probability of its recurrence from time to time).

In the hypertrophic or osteo arthritic group, results were not so good, averaging a satisfactory outcome in less than 50 per cent of cases (6 of 13 cases). I am inclined to use intravenous sulphur in these cases rather than gold or alternate injection of each—one weekly.

In the "mixed" group of cases results were also not so good as in the atrophic variety. Excellent or good results were obtained in 46 per cent of cases, (10 to 18), questionable to poor in 54 per cent.

One case of gonorrheal arthritis responded well. I realize the inadvisability of reporting one case of anything; one case of spodylitis did poorly, equally inconclusive.

The above reported results are not entirely comparable to those of other workers, I realize. This is due partially, I believe, to the fact that all cases which did not complete a full course of treatment

(many of mine have not done so at this date) are not included. Furthermore, I have included all gold treated cases and not selected those which have failed to respond to other treatment. In addition, many cases reported received, where indications arose, other than gold therapy. This included proper amounts of rest and exercise; correction of diet; attention to anemia, general use of Vitamins (especially D); physiotherapy (Iontophoresis and short wave), organotherapy, analgesics, attention to the proper elimination, and removal of foci of infection (including some gall bladder drainages and autogenous vaccine). One might say that this type of care would "cure" any arthritic; but it has failed to do so in a substantial number of patients where gold was not employed; or where intravenous vaccine, sulphur, NeoSalvarsan (as advocated by Dr. Russell Haden), Sodium thiosulphate or large doses of Vitamin B were used intravenously instead of gold salts.

**COMMENT:** Contrary to general opinion, gold therapy need not be expensive. Also, it need not be dangerous if conservative products and doses be employed.

Blood counts and urinalyses should be made monthly, or more often during treatment. Some physicians make a urinalysis before each injection. Blood Sedimentation tests represent a fair index of progress.

Treatment with gold should be started as early as possible. Our experience is in agreement with most reports that the earlier in the disease chrysotherapy is instituted the better the results. To a lesser degree it is also true that the younger the patient the better the outcome.

Patients should be warned about the possible toxic effects of gold salts, but not frightened by loose general statements or mis-statements.

Good arthritic results are obtained often following reactions. Indeed, some workers have attempted to produce a jaundice because of its apparent beneficial effect on the patient with arthritis.

Although we have used gold salts rather universally in arthritics during the past year, without serious toxic reactions, their use should be restricted generally to the severe joint involvement which has not responded to other measures, and where the patient is under careful observation.

Several patients with both skin and joint lesions were doubly benefitted by gold injections.

Patients should not be promised a "quick" cure by gold. Necessity for pro-

longed treatment, in series, should be explained at the outset. Any case "cured" with a few injections did not have much or any arthritis to begin with.

#### CONCLUSIONS

1. The history of chrysotherapy is epitomized, and a listing made of the salts commonly used.

2. The mode of action of gold in the body is discussed.

3. An attempt is made to fairly evaluate reactions and suggest their prevention and treatment.

4. Dosage and the better than average results obtained are emphasized—especially in rheumatoid arthritis.

5. A conservative but optimistic approach is stressed, and the inexpensive feature noted.

6. Early treatment is advocated.

7. Gold should not be advertised as a panacea or "quick cure."

#### PSYCHIATRY AND MILITARY SERVICE

JOHN D. CAMPBELL, M. D.

Louisville

In these critical days man-power is essential to our national life. Physicians are the key-men in evaluating man-power; it is their duty to select men who will make good soldiers. The physician must be able to recognize those features of a man's character which enable him to meet emergency situations; he must look for those traits which render a man difficult to mold into an organization. It was learned in the last war that man-power is more than muscle and bone, more than a "good stomach," functioning kidneys, and a normal heart and chest. Soldiers also have nervous systems, suggestible minds, and nerves susceptible to stress and strain. These facts were not carefully heeded in the 1917 draft. The government is still burdened with many psychoneurotics and schizoid personalities who should have remained on the farm or in the factory. Soldiers who are inducted into the Army today will be officers and men of the reserve for the next ten years.

There has been some loose criticism in the public press concerning the psychiatric examination given to recruits at the induction stations. We all regret that time does not permit a more careful scrutiny of each prospective soldier. Military schedules must be followed and "orders from Washington" will not wait for prolonged

observations. One writer seemed to think that all a draftee has to do is say he is nervous or hears voices, and the psychiatrist turns him down. This is a regrettable misunderstanding which spreads to the next crop of draftees, and might encourage a pernicious attitude. Incidentally, psychiatrists are not quite so naive as some self-appointed critics apparently think.

Unfortunately each rejected candidate is entitled to a report in writing, stating the reason for his rejection. If the diagnosis happens to be a functional mental condition for which the young man's mind is not prepared, an improvement could hardly be expected. A brief but sympathetic and explanatory talk from his family physician may prevent the development of inferiority and anxiety feelings in the young man. We physicians on the induction boards request the cooperation of our colleagues in such unfortunate situations.

Physicians vary in their views regarding the psychiatric examinations of prospective soldiers. Some are keenly interested in knowing how the work is conducted. Others are skeptical that a brief examination is sufficient to pass or reject a selectee at an induction station. It is significant that men doing neurology, psychiatry, and neurosurgery, quickly appreciate the vital importance of such work. Many of us have dealt with the difficult nervous and mental problems from the last war. This discussion is motivated by a desire to clear up misunderstandings, to cooperate with fellow-physicians, and to offer certain suggestions which may be of general use. Selective Service physicians, industrial surgeons, and college physicians may find here a practical approach to their everyday psychiatric problems.

Few neurologic conditions were encountered in the first 1,000 draftees examined at the Induction Station in Louisville, Ky., during January, 1941. The Selective Service physicians deserve credit for this phase of their work. Only four were rejected for neurologic (not psychiatric) diagnoses: one brain tumor, one myotonia congenita, one post-traumatic syndrome and one epileptic. Sequelae of anterior poliomyelitis were noted in several, but these were not rejected because their atrophies either did not involve essential muscles, or were too minor to interfere with the individual's motor capacity. The neurologic examination is particularly helpful in exposing those who would feign disabilities. The sincere applicant simply goes through the procedure as re-



quested, while the malingerer performs with studied accuracy. He has a part to play and does not intend to be caught unawares. In the complicated maneuvers of a neurologic examination, however, the malingerer unconsciously overacts his role.

#### EPILEPSY

In the process of induction under army auspices it is customary to ask each examinee if he suffers with headaches, dizziness, fainting spells, fits or convulsions. He is questioned concerning weakness in either arm or leg, and a history of skull injury or fracture is sought. Affirmative answers are investigated further in an attempt to elicit symptoms of a definite neurologic entity. Epilepsy is not mentioned specifically, but always kept in mind. Whenever an individual complains of convulsions he should be questioned in detail concerning his fits: as to age at onset, auras, frequency of attacks, injuries during attacks, incontinence, any recollection of attacks, post-convulsive symptoms, minor or petit mal attacks, and the treatment he has received for the convulsions. This series of questions should properly evaluate the authenticity of the claimed illness. (It should be remembered that convulsions are only a symptom, and the underlying neurologic condition should be found when possible.) The local examiner is in an enviable position to rule out epilepsy, either from his personal knowledge or from the registrant's family or neighbors. It is always well to have the patient describe one attack in detail. The malingerer or psychoneurotic sometimes forgets the essential diagnostic feature of epilepsy, unconsciousness, and describes too much. When all the details of the illness are discussed, the real epileptic will eventually drop a statement which immediately separates his story from that of the malingerer or hysterical neurotic. In addition to scars, stigmata of degeneration should be looked for in epileptics. These are marked myopia, deformities of the head, face, or eyes, and endocrine disturbances. Real epileptics, as a rule, will be anxious to get in the Army.

A thorough acquaintance with the various kinds of auras described by epileptic patients is invaluable in deciding between real and simulated epilepsy. A malingerer may be able to describe, or even exhibit, a very good generalized convulsion; he may bite his tongue and froth at the mouth, but his description of his sensations preceding the fit never seems to ring true. Wilson<sup>1</sup>, devotes no

less than nine pages to a discussion of the epileptic aura. There are many kinds of auras. One patient describes a feeling that he is going back to a situation which happened years ago. Another patient complains that suddenly his surroundings seem strange to him, and he realizes a fit is imminent. One patient's petit mal attacks did not seem reliable to me until he said, "Just before each attack I always see a man—he's a man I knew a long time ago—I don't know exactly who he is but he is strangely familiar." Other auras consist of a feeling of being somewhere else, strange tastes, putrid odors, bright lights, noises, or moving colors. Not all epileptics have auras. On the other hand, some epileptics may experience auras for several years before any convulsions occur. A thorough knowledge of auras will often prevent a diagnosis of psychoneurosis.

If petit mal attacks are the only manifestation of epilepsy, a more difficult problem is encountered. Again, however, the examinee is asked to describe in detail one of his attacks. He may call them "fainting spells," "blank spells," "fainting out spells," "blind fits," "dizzy spells," "turning sensations," or "weak spells," the essential characteristic being a momentary loss of consciousness. The malingerer or psychoneurotic has a tendency to dramatize these minor attacks, while the true epileptic discusses them in a very matter of fact manner. There is very little to describe as he is unconscious during the ictus. The malingerer or psychoneurotic often disregards this fact in his attempt to impress the examiner. Some epileptics have generalized convulsions without petit mal; others have only petit mal. The electroencephalogram may have to be the final proof in some of these patients.

#### PSYCHIATRIC EXAMINATIONS

An attempt will be made to outline a brief psychiatric examination. My co-worker, Dr. A. Guiglia, and myself, worked out this brief and practical outline which we have found sufficient in 98 per cent of the cases. It is not recommended as a routine psychiatric examination. We have chosen what we consider to be significant questions, those most likely to elicit psychopathologic material. No psychiatric examination can be any better than the examiner's ability to interpret his findings; hence, each question is discussed, explaining what the psychiatrist expects to learn.

Young men, away from home, some for

the first time, and undergoing detailed examinations, were naturally ill-at-ease, nervous, or a little frightened. Some were sleepy, having stayed in a strange hotel the night before, and kept awake by the more boisterous element; some showed the effects of alcohol, and a very few were intoxicated. With all this panorama of manhood it is well to start with a smile, if possible. "What are you mad about?" or simply, "How do you feel?", often relieves a man, produces a smile, and with it some statement which is a lead to his personality. Incidentally, the psychiatric examination begins with this smile. His readiness to smile, the warmth of the smile, its natural response, together with the facial expression, offer valuable data in estimating the personality. Evidences of grimacing, mannerisms, or peculiar habits of speech are noted. An experienced psychiatrist often gets an impression from the smile alone. The psychoneurotic and psychopathic personality are too occupied with their own worries to smile naturally. The mental defective is fearful or inadequate in his emotional response; the simple dementia praecox may smile in a silly manner, or being indifferent, may not smile at all.

#### MENTAL DEFICIENCY

Having obtained the smile (or not) the psychiatrist proceeds to ask the examinee a half dozen questions. (1) How far did you get in school? If the man reached high school, and has an intelligent appearance, mental deficiency need not be suspected. Below the eighth grade, however, it is surprising how a moron can advance in grades. The Army accepts subnormal mentalities above the grade of imbecile. Ability to make a living for one's self, and to execute simple orders, are the criteria set down by the regulations. Examinees who had advanced no further than the sixth grade were questioned concerning simple arithmetic and geography.

It must be kept in mind that all mental defectives are emotionally unstable people, particularly when removed from their simple environment and regular habits. Therefore, when any degree of mental deficiency is established, a more careful study is indicated to determine the emotional stability of the individual, his ability to mix with other people, and any tendencies toward a psychosis. Some mental defectives present a schizoid, shut-in type of personality; these would never adjust to Army life. The mental defective's reaction to his trip to the city may be an

index to his emotional stability. His gregarious propensities are noted; can he adjust in a crowd? His interest in the opposite sex is important, as it indicates his degree of regression.

Mental deficiency should not be confused with ignorance or illiteracy. One of our examinees had worked ten years for the same man for \$200 per year. He could neither read nor write, did not know the capital of his State, and was not certain whether or not the U. S. was in the war. Nevertheless, he had \$1,400 in the bank, displayed an innate ability to get along in the world, and would no doubt make a good soldier.

#### PSYCHOPATHIC PERSONALITY

Having evaluated question number one, which was answered satisfactorily by 98 per cent of the examinees in ten seconds, the psychiatrist is ready to ask the second question. (2) What kind of work have you done since you quit school? Evidence of sustained effort indicates a steady, dependable type of personality. If a man says he has worked two or three years for the same company, even without promotions, this is highly significant. Remaining with the same organization for two or three years indicates a steady, reliable, adaptable, sociable type of person, all of which would help to make a good soldier. (Exceptions are farm-work, sheep-herding, and other lonely occupations which will be discussed later). Having spent six months or a year in a CCC camp is good proof a registrant is malleable and able to adjust to routine and organization. On the other hand, the man who has been unemployed, or worked only three months here and six months there, becomes a subject for more careful study and observation. Why did he quit this job? Why was he discharged from the other? In most cases, satisfactory answers are forthcoming. But in others the more the man talks, the more the psychiatrist feels he is dealing with a psychopathic personality. The latter blames his first employer for giving him a dirty deal; he quits another job because he was asked to work thirty minutes over-time, and he wants to get in the Army because he has failed at everything else. The psychopath is an emotionally unstable individual who has been unable to learn by experience; he is usually intelligent but aggressive, and lacks in those finer attributes of conscience which make the average man a sociable animal. An essential feature of the psychopath's personality is his ability to rationalize, to justify his every act. When



talking to the authorities or to the physician, no one can make a better impression than the psychopathic personality. He is represented in everyday life by the ne'er-do-well, the shyster lawyer, the quack doctor, the swindler, and in military life, by the soldiers of fortune. Benedict Arnold and Aaron Burr were two very interesting psychopathic personalities whose selfishness and rationalizations caused them to defy their own country. The diagnosis of this mental aberration cannot be better made than by a longitudinal picture of the individual's life. If this has been marked by repeated conflicts and escapades of a similar nature, do not be persuaded to think that the "Army will make a man out of him," or that "He won't do that in the Army." The neighbors may say, "He should be in the Army if my boy has to go," but no taxpayer should want the psychopath on the government pay-roll.

#### SIMPLE DEMENTIA PRAECOX

Up to this point the psychiatrist has asked only two questions. Having ruled out mental deficiency and its associated emotional instability, as well as psychopathic personality, he has at the same time looked for evidences of psychoneurosis and simple dementia praecox. The other three types of schizophrenia (paranoid, hebephrenic and catatonic) are rare in young men who are adjusting outside of institutions. Individuals with latent schizophrenia present evidences of the schizoid personality: indifference, superficial emotional reaction, withdrawal from society, regression to a more immature level of psychosexual development, and a tendency to introspection. As psychiatrists, we try to discover, not only the frankly psychotic who are hallucinating freely, but these minor degrees of abnormality which would precipitate into a more malignant condition under stress and strain. People with simple schizophrenia and latent schizoid personalities of all types rarely hallucinate. When an individual complains of hearing voices or seeing visions, he should furnish sufficient additional material of a delusional nature to leave no question concerning his sanity.

Farm labor is the ideal occupation for the simple dementia praecox. This work requires little close supervision, and permits the living of a solitary existence; there is no conflict with close neighbors, and his dream life may proceed unchecked. It is remarkable how so many people of this type find their own adjustment in the

world. We find them working as janitors, warehouse elevator operators, pumpers in oil-fields, railroad flag-men, and sheepherders. Remove this schizoid individual from his protected environment and put him, of all places, in the Army, and he will be sure to precipitate a frank psychosis. But do not think the psychiatrist makes a diagnosis on occupational status alone.

The simple praecox may be above average in intelligence, but is indifferent and shows an inadequate interest in the whole procedure. His school knowledge is usually well retained, he can answer all questions about geography and arithmetic. He may or may not know whether the United States is in the war, not because he is unintelligent, but simply because he lacks in interest. He is more conscientious than the psychopathic type of personality, less aggressive, and more reticent, sensitive, and introspective. Under observation he presents a worried, anxious, uneasy facial expression. He expresses his anxiety and nervousness in terms of gastric or colon disorders, insomnia, headaches, or other somatic complaints. Many of the farm laborers of this type assert they do not drink, and have never been intimate with members of the opposite sex. The more "sophisticated" urban praecox, however, has obtained some solace from one or two beers per day, and may admit that he visits a prostitute on rare occasions. The simple praecox will not be a person to enjoy barracks stories. His place is not in the Army but back in that sheltered life which he has found for himself, without the help of either social workers or psychiatrists.

#### PSYCHONEUROSIS

The third and remaining questions of the rapid psychiatric examination are intended to dislodge any psychoneurotic material. The purpose here again is not only to recognize the obvious psychoneuroses, but to uncover any latent manifestations which might succumb to the stress of Army life. Not infrequently the first question, concerning advancement and adjustment in school, may lead to early indications of a neurotic constitution. For instance, the individual may have missed school frequently, suffering with vague gastric disorders, headaches, or "colds." Repeated attacks of "chronic appendicitis" are very suspicious in my experience. More than one abdominal scar on a young man calls for explanation.

The third question, What do you do in your spare time?, includes, friends, interests, pastimes, hobbies, etc. In most cases

this can be gotten over rapidly. As indicated previously, the mental defective and schizoid individuals show very little interest in the opposite sex. The psychoneurotic is occupied with himself, while the psychopathic personality is interested in other people in order to further his own schemes.

The fourth question usually is, have you had much sickness in your life? Most men answer this briefly and to the point. We all recognize the neurotic answer, as well as the manner in which it is given. It should be noted that up to this point the examinee has been asked no leading questions concerning his nerves, nervous conditions, or a familial history of same. Having obtained an opinion of the man by this time, it is well to ask the fifth leading question: Have you ever had any nervous trouble of any kind? To this question, again, most young men answer immediately in the negative. The psychoneurotic often betrays himself by his facial expression which seems to say: "I am glad you brought that up!"

It should be noted that throughout this examination the psychiatrist has sought for particular personality types. For instance the psychopath who projects all his difficulties upon his neighbors does not realize he is "writing his own ticket." We do not ask the schizophrenic if he hears voices, but we do want to know how he adjusts on his job, who he mixes with, and what he does Saturday nights. Now comes the psychoneurotic, a picture of excellent physical health, who describes enough symptoms to slay an army. The psychiatrist looks beyond these complaints, which represent so much camouflage to seek a picture of the underlying personality. Essentially the psychoneurotic is a constitutionally inadequate individual who is attempting to adjust to a cruel and realistic world by substituting symptoms for his own inadequacies. The neurotic symptom is unconsciously evolved, and is a by-product of a sincere attempt to overcome a more serious problem.

Recognition of the underlying neurotic constitution is more important than a study of the examinee's complaints. In the neurotic it is the apprehensive, worried, distressed manner which impresses the psychiatrist, more than the symptoms described. Some of these young men, in contrast to their fellows, presented the general appearance of an individual who has recently received an injection of adrenalin: bright alert eyes, dilated pupils,

increased respirations, fast pulse, warm dry skin, and tense, nervous facial expression. The blood pressure proved to be unduly high in some of these hypersensitive individuals. On the other hand, there is the vagotonic or neurasthenic type of psychoneurotic with a cool, damp skin, slow pulse, hypotension, and sluggish reactions. The former is more likely to complain of nervousness, the latter of somatic complaints. It is interesting that the experienced army officers, when these rejected men were pointed out, listened to their story, and commented, "yes, that is the kind of soldier who causes trouble in the Army. The Sergeant doesn't know what to do with him; officers—even medical officers—do not understand their psychology, and from start to finish the soldier is a misfit, troublesome, and worse than all, a bad moral influence on other men."

#### OTHER PERSONALITY TYPES

Chronic alcoholism, in the light of modern psychiatry, is considered another mode of escape from reality. It is not so important how much a man drinks as why he drinks. Does he drink alone or with friends? Does he use alcohol to allay deep feelings of inadequacy? Alcoholics rarely realize that unconscious mental conflicts are responsible for their desire to escape reality. Unfortunately, these unconscious processes continue to function, whether a man is in the United States Army or loafing at home.

Some laymen, and even some physicians have the idea that the Army might be used as a refuge, a social center, or reform school for those who have made a poor adjustment elsewhere. I do not believe it is fair either to the individual or the Army to push the maladjusted into the ranks. We often hear it said, "The Army will make a man out of him." We are still paying dearly for that attitude in 1917. It has been estimated by Dr. H. S. Sullivan, psychiatric adviser for the Selective Service system, that one mentally abnormal soldier eventually costs the government \$33,000.

The hobo type of personality is another which people feel should go into the Army. As pointed out before, individuals have an uncanny ability in finding their optimum place in the world. There is an underlying personality drive which urges men this way and that, always seeking pleasure or "the absence of pain." The hobo or wanderer learned early that his personality could not "bear the slings and



sorrows of outrageous fortune." Hoboes not only do not mix well with other people, but they do not become too friendly with each other. This is a fortunate thing, for the law enforcement officers. The hobo type of personality is essentially that of the simple praecox or psychopathic personality, usually the former. Forced to live in close quarters, these inadequate people become uneasy, anxious, suspicious, and panicky. One of these weary characters passed through our Induction Station. His first night with a large number of men proved to be too great for his shaky constitution. He became upset, complaining the next morning that several of the young men tried to get into bed with him. The Sergeant let it be known that such behavior would not be tolerated, that such things were strictly forbidden in the Army, etc. Questioning however, revealed that our hobo friend was undergoing a homosexual panic, projecting his own desires and fears upon those of his fellows.

#### CONCLUSIONS

It can be seen that only a few questions may furnish leads for further investigation, as indicated by the examinee's answers and the examiner's experience. A study of an individual's life history is the best guide to his personality. It is safe to say that the latter will not change appreciably in the next ten years. Laymen seem to doubt the psychiatrist's ability to recognize pathological personalities in a brief interview. It should be pointed out that experience and technique are as essential in a psychiatric examination as in a chest or abdominal examination. If the patient with an acute abdomen says spontaneously, "Doctor, the pain started last night up here in the pit of my stomach and now it is down here in my right side," the surgeon notes the facial expression, and regardless what the blood count shows, he prepares for an immediate operation. We must give the psychiatrist credit for as promptly recognizing equally significant statements in his type of work. Indifference and anxiety, for instance, may be just as important symptoms as dyspnea and edema.

Too much praise cannot be given our colleagues on the Selective Service boards. The low percentage of rejections, for neurologic and psychiatric cases, at the Louisville Induction Station is directly due to their keen observation and diligent efforts.

(1) S. A. K. Wilson, "Neurology," Vol. II, Williams and Wilkins Co., Baltimore, 1940.  
(310 Brown Bldg.)

#### NEWS ITEMS

Dr. John R. Fairchild, 75, who combined the practice of medicine with the ministry and who said he never issued a bill, died January 14 of a heart ailment.

A physician fifty-one years and a Baptist minister thirty-nine, he said recently he had delivered 4,326 babies, officiated at 1,500 funerals and married more than 1,000 couples, including many individuals he brought into the world.

Born in Johnson County and graduated from the Louisville Medical College, he came to Inez in 1890. He had been Martin County Health Officer thirty-five years.

Earle J. Brashear, North Pleasureville, graduate of the Hospital College of Medicine, Louisville, 1898; aged 65; died, November 27, 1940, in the Pewee Valley Sanitarium and Hospital, Pewee Valley, of bleeding peptic ulcer with secondary anemia.

Charles Frederick Voigt, Midway, graduate of the University of Louisville Medical Department, 1915; past president and secretary of the Woodford County Medical Society; served during the World War; aged 47; died, November 19, 1940.

W. L. Gossett, of Adairville, died on January 16th. Dr. Gossett will be remembered as one of the leading obstetricians of Louisville for many years and the author of several books on Prenatal Care.

The following Medical Reserve Officers have been called to the colors: Robert J. Griffin, Rufus C. Alley, Robert J. Downing, and John H. Rompf, Lexington; Lee A. Dare, Lawrenceburg and Robert L. Loftin, Cynthiana.

At 1:00 o'clock, on February 11, 1941, Drs. S. A. Blackburn, Paul E. Corum and George H. Gregory presented their credentials to Judge Matt T. Blackard and were sworn in as members of the Woodford County Board of Health from January 1, 1941 to January 1, 1943. Dr. George H. Gregory was named chairman of the Board and County Health Officer.

The year 1941 marks the Diamond Anniversary of the founding of Parke, Davis & Company, a firm which had its inception in a small drug store in the city of Detroit, Michigan, and which, during the past seventy-five years, has become the world's largest makers of pharmaceutical and biological products. This firm has been a constant advertiser in the Journal for years.

Dr. J. Mack Roberts, Monticello, a graduate of University of Louisville School of Medicine, class of 1932, was married to Miss Alma Dolan of Monticello, on January 18, 1941.

W. E. Gardner and J. R. Peabody announce the removal of their offices from 905 Heyburn Building to Suite 721 Brown Building, 321 West Broadway, Louisville.

The American Association for the Study of Goiter again offers the Van Meter Prize Award of Three Hundred Dollars and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland. The Award will be made at the annual meeting of the Association which will be held at Boston, Mass., May 26th, 27th and 28th, providing essays of sufficient merit are presented in competition. For further information communicate with the Corresponding Secretary, Dr. W. Blair Mosser, Biddle Street, Kane, Pennsylvania, not later than April 1st.

#### BOOK REVIEWS

**OFFICE UROLOGY.**—By P. S. Pelouze, M. D., Assistant Professor of Urology, University of Pennsylvania, Consulting Urologist, Delaware County Hospital, Special Consultant to United States Public Health Service; Member of Board of Directors, American Social Hygiene Association and American Neisserian Medical Society. 766 pages with 443 illustrations, 19 in color. Philadelphia and London: W. B. Saunders Company, 1940. Cloth, \$10.00.

This new edition contains the sum and substance of what the author has learned during 28 years of office practice and of teaching students. It is presented in response to the expressed need of General Practitioners for a book devoted entirely to the diagnosis and nonoperative treatment of the urologic disorders met in everyday practice.

Here are the methods, the diagnostic procedures, the actual therapeutic measures that Dr. Pelouze himself is using in his own office practice and which, as he says, can be readily carried out by the family physician.

You are told what equipment you must have. You are guided on taking the history, told how to examine the patient and how to perform in your office the necessary laboratory tests. Of special note is the fresh approach and marked emphasis that have been given to the psychological problem.

Urogenital symptoms are presented with special reference to their clinical significance. An entire chapter is devoted to Treatment—and this in addition to the therapy given under each

disease or condition. Caution and warnings are constantly injected into the text.

The volume includes an extensive consideration of Cystoscopy and Roentgenography—and these are, by all odds, among the finest presentations of their kind in print.

**PLAGUE ON US.**—By Giddes Smith. Published by the Commonwealth Fund, New York. Price \$3.

This graphic account of the struggle of mankind through twenty centuries to understand and forestall pestilence sums up what is known and points out how much is still unknown about epidemic disease—the plague that falls upon the people. Written from a layman's viewpoint and in everyday language, and approved by authorities in epidemiology and bacteriology, it deals with man as the stuff of which epidemics are made, with the parasites that haunt the stomach of the flea and the spittle of the droning mosquito, with the case of the sleepy lobsters and the case of the plumber's patchwork and other detective stories of disease, with the biological drama that lies behind the Black Death—and Mary Lou's snuffle.

**ELECTROCARDIOGRAPHY IN PRACTICE.**—By Ashton Graybiel, M. D., Instructor in Medicine, Courses for Graduates, Harvard Medical School; Research Associate, Fatigue Laboratory, Harvard University; Assistant in Medicine, Massachusetts General Hospital; and Paul D. White, M. D.; Lecturer in Medicine, Harvard Medical School; Physician, Massachusetts General Hospital, in charge of the Cardiac Clinics and Laboratory. 319 pages with 272 illustrations. Philadelphia and London: W. B. Saunders Company, 1941. Cloth, \$6.00.

This new volume is the result of 25 years experience of the authors in the Cardiac Clinics and Laboratories of the Massachusetts General Hospital and its contents are devoted exclusively to the interpretation of electrocardiograms. Special chapters are devoted to diseases of the heart.

A complete analytical index is included at the end of the volume.

**HOW TO PREVENT GOITER.**—By Israel Bram, M. D., Medical Director, Bram Institute for Goiter and Other Glandular Diseases, formerly Instructor in Clinical Medicine, Jefferson Medical College, Philadelphia. E. P. Dutton & Co., Inc., Publishers, New York. Price \$2.00.

The contents in this small book are based upon personal contact with over 17,000 cases of thyroid disease over a period of 30 years.



# Kentucky Medical Journal

Published Monthly By  
THE KENTUCKY MEDICAL ASSOCIATION  
Incorporated

Entered as second class matter October 22, 1906, at the Postoffice at Bowling Green, Ky., under act of Congress, March 8, 1879.

Subscription Price .....\$5.00  
Edited Under Supervision of the Council

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NEXT MEETING LOUISVILLE  
SEPTEMBER 29—OCTOBER 3, 1941

## COUNTY SOCIETY REPORTS

**Jefferson:** The Jefferson County Medical Society met Monday night, January 20, at the Pen-dennis Club to install new officers headed by M. J. Henry, who succeeded E. Lee Heflin as president. Woodford B. Troutman was named president-elect and other officers chosen were R. O. Joplin, first vice-president; Gordon S. Buttorff, second vice-president; B. Wilson Smock, secretary, and Maurice G. Buckles, treasurer. Elected to three year terms on the judicial council were James W. Bruce and Sam Overstreet. E. Lee Heflin, retiring president, gave his address, History of Jefferson County Medical Society. After an enjoyable evening of good fellowship and a fine dinner, the meeting adjourned.

B. W. SMOCK, Secretary.

**Jefferson:** The Jefferson County Medical Society had a very interesting program. Applications for membership were received from the following: J. D. Belton, Donald H. McRae, Lawrence T. Minish, Jr. and W. B. Moore. The program was as follows: February 3: Case Report: A case of Pulmonary Fusospirochetosis Presenting Diagnostic Difficulties, J. A. Bishop. Present Status of Immunization in Childhood, James H. Pritchett, and Bleeding Peptic Ulcers, H. H. Hagan.

### February 17th

Dinner meeting at the Brown Hotel with Dr. George B. Eusterman, Head of Section in Division of Medicine, The Mayo Clinic, Rochester, as guest speaker. Subject: Notes on Progress in Present Day Diagnosis and Treatment of Chronic Peptic Ulcer and Gastritis. This proved a delightful affair, and was very largely attended.

B. WILSON SMOCK, Secretary.

**Pike:** The following officers were elected for the year 1941: President, Henry Kaminiski; Vice-President, J. C. Preston; Secretary, F. H. Hodges.

The Society voted to hold all future meetings at the Methodist Hospital in conjunction with the staff meetings of the hospital. These meetings come on the first Tuesday of each month.

F. H. HODGES, Secretary.

**Pike:** The regular monthly meeting of the Pike County Medical Society was held Monday night February 4th, 1941.

The following physicians were present: Drs. S. B. Casebolt, H. I. Berman, M. D. Flanary, H. K. Bailey, E. P. Wright, A. G. Osborne, F. A. Vernon and F. H. Hodges. The meeting was devoted to the planning of the scientific program for the coming year. F. A. Vernon will present a paper at the next monthly meeting on Transfusion.

F. H. HODGES, Secretary.

**Scott:** Meeting of the Scott County Medical Society was held Friday night, January 17th, at 7:30 p. m., at the home of H. V. Johnson. The following members were present: H. G. Wells, H. V. Johnson, W. S. Allphin, F. M. Wilt, R. C. Lake, E. C. Barlow, H. H. Roberts, A. Y. Covington. Meeting called to order by the president, H. G. Wells, and the minutes of previous meeting read and approved.

Upon motion by F. M. Wilt, seconded by H. H. Roberts, and a unanimous passage by the society, the following resolutions regarding birth control were approved. WHEREAS, Contraception, used to save life and promote health, is an important adjunct to the practice of medicine, and WHEREAS, The prescription of contraceptives is properly a function of the medical profession, and WHEREAS, in 1937 the American Medical Association went on record favoring the assumption by physicians of leadership with respect to birth control: BE IT RESOLVED: That the Scott County Medical Society recommends a knowledge and prescription of contraceptives by the physicians of this State where pregnancies are contraindicated. AND, BE IT FURTHER RESOLVED; That the Scott County Medical Society approves in principle the prescription of scientific contraceptives as a part of the preventive medical services in this State.

The discussion of the formation of a hospital staff for John Graves Ford Memorial Hospital was led by F. M. Wilt, which was followed by a general discussion. F. M. Wilt stated the reasons for formation of such a staff. Motion was made by F. M. Wilt, seconded by H. V. Johnson, that the Scott County Medical Society organize a staff for the John Graves Ford Memorial Hospital and that any member of the county society automatically becomes a member of said staff if he chooses, also that the staff elect officers and appoint a committee of three to cooperate with and make suggestions to the Hospital Board of Trustees, and that we follow the rules of procedure, was carried unanimously.

Election of officers of hospital staff by secret ballot and a majority vote were as follows: chief of staff, H. V. Johnson; assistant chief of staff, Ralph C. Lake; secretary and treasurer, F. M. Wilt. Motion by H. H. Roberts, seconded by F. W. Wilt, that a copy of the articles of resolutions be prepared and given to each member of the hospital board. Passed unanimously. A general discussion was held as regards the charge to be made for marital examination of couples requesting this service in Scott County. A motion was made by R. C. Lake, seconded by F. W. Wilt, that the Scott County Medical Society approve a charge of three dollars for such pre-marital examination as required by law, this to include the couple.

This charge does not include the laboratory fee for the examination of the blood. The resolution was passed unanimously.

Motion by H. V. Johnson, seconded, by W. S. Allphin, that the secretary of the society send W. O. Bullock, Lexington, a telegram expressing the sympathy from the society and best wishes for an immediate recovery of his illness. Passed unanimously.

Meeting adjourned at 9:15. Next meeting will be held the first Thursday in February, at the John Graves Ford Memorial Hospital.

A. Y. COVINGTON, Secretary.

**Union:** The Union County Medical Society held its annual business meeting, January 7, 1941. The election of officers was as follows:

J. W. Conway, Morganfield, President; Gordon B. Carr, Sturgis, Vice-President; Bruce Underwood, Morganfield, Secretary; Darrell Vaughn, Delegate; C. B. Graves, Alternate.

Medical dues were assessed and then business matters were discussed. Meetings were to be continued to be held the first Tuesday of each month.

The society was addressed at its second monthly meeting by Dr. Pierce MacKenzie, Obstetrician and Gynecologist, Evansville, on the subject of Leukorrhea who gave a well organized discussion of that subject.

Dr. E. Dargan Smith was to be invited as the speaker for the March meeting.

BRUCE UNDERWOOD, Secretary.

**Woodford:** On Friday, February 7, 1941, the Woodford County Medical Society met at dinner at the Woodford Memorial Hospital, Versailles. Those present were Dr. P. F. Corum, presiding; Drs. J. P. Holt, S. J. Anderson, W. C. McCauley, S. A. Blackman, Olson Parrott, George H. Gregory and Francis Massey, of Lexington, Kentucky, guest. Miss Kitty Baird and Mrs. Elsie Talbott, honorary members, were also present.

Following a splendid dinner the meeting was called to order by President Corum and after the reading of the minutes of the previous meeting, officers for the ensuing year were elected as follows: W. C. McCauley, Versailles, President; S. J. Anderson of Midway, Vice-President and George H. Gregory, Versailles, Secretary. Following conclusion of the business, Dr. Massey gave an interesting talk on the "Incidence of Amebic Infections in Central Kentucky." The paper was discussed by Drs. Holt and McCauley. At the end of the program the meeting adjourned until the club should meet again the second Friday in April.

JOHN H. GREGORY, Secretary.





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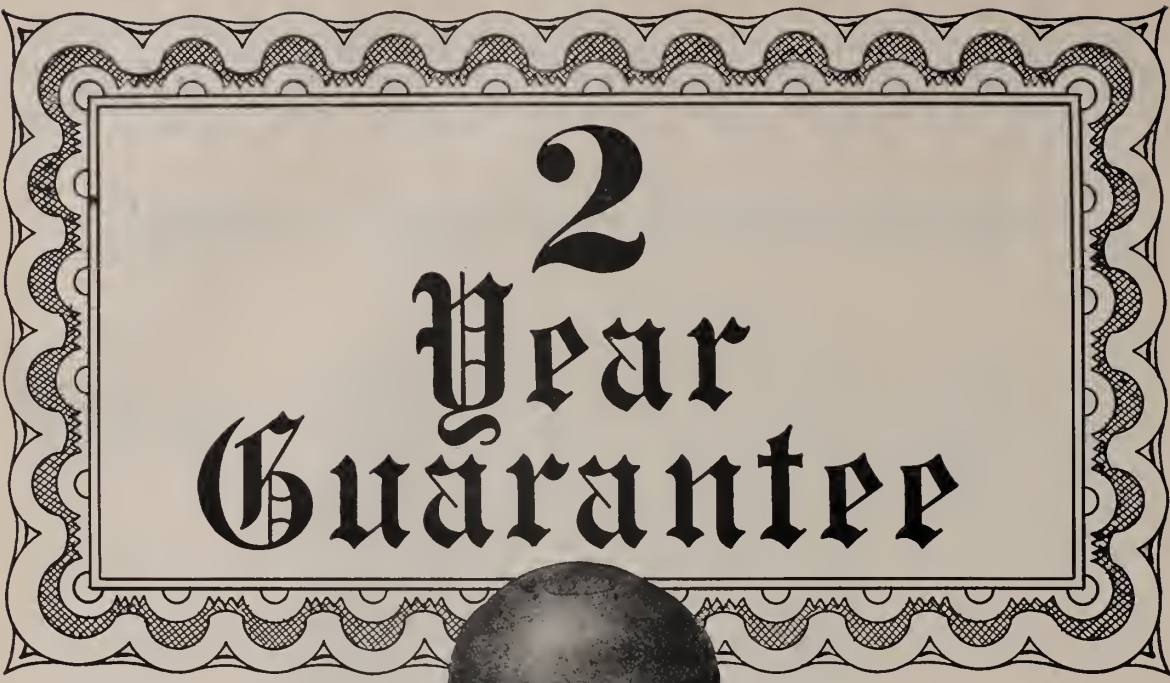
<sup>1</sup> Sevringhaus, E. L., and Evans, J. S.: *Am. J. M. Sc.* 178:638, Nov. 1929.

<sup>2</sup> Novak, Emil: *Surg. Gynec. & Obst.* 70:124, Jan. 1940.

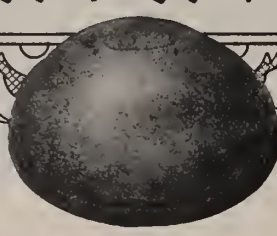
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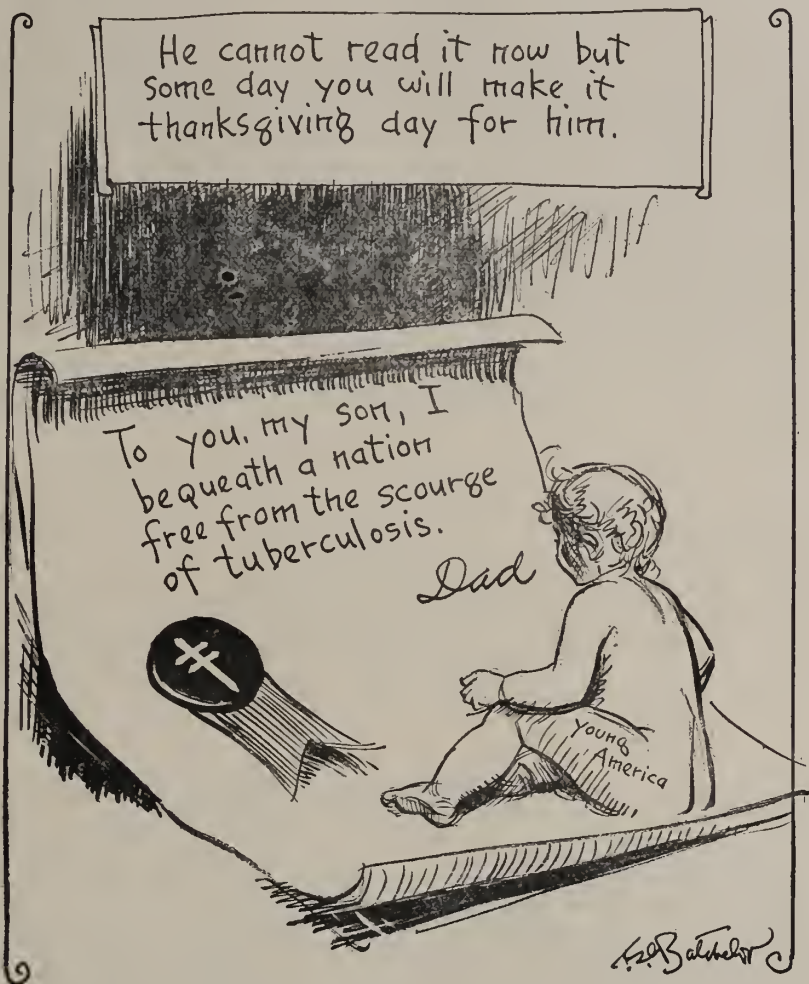
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*A bambino from the Foundling Hospital, Florence, Italy,—A. della Robbia*

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BOWLING GREEN, KY.

APRIL, 1941

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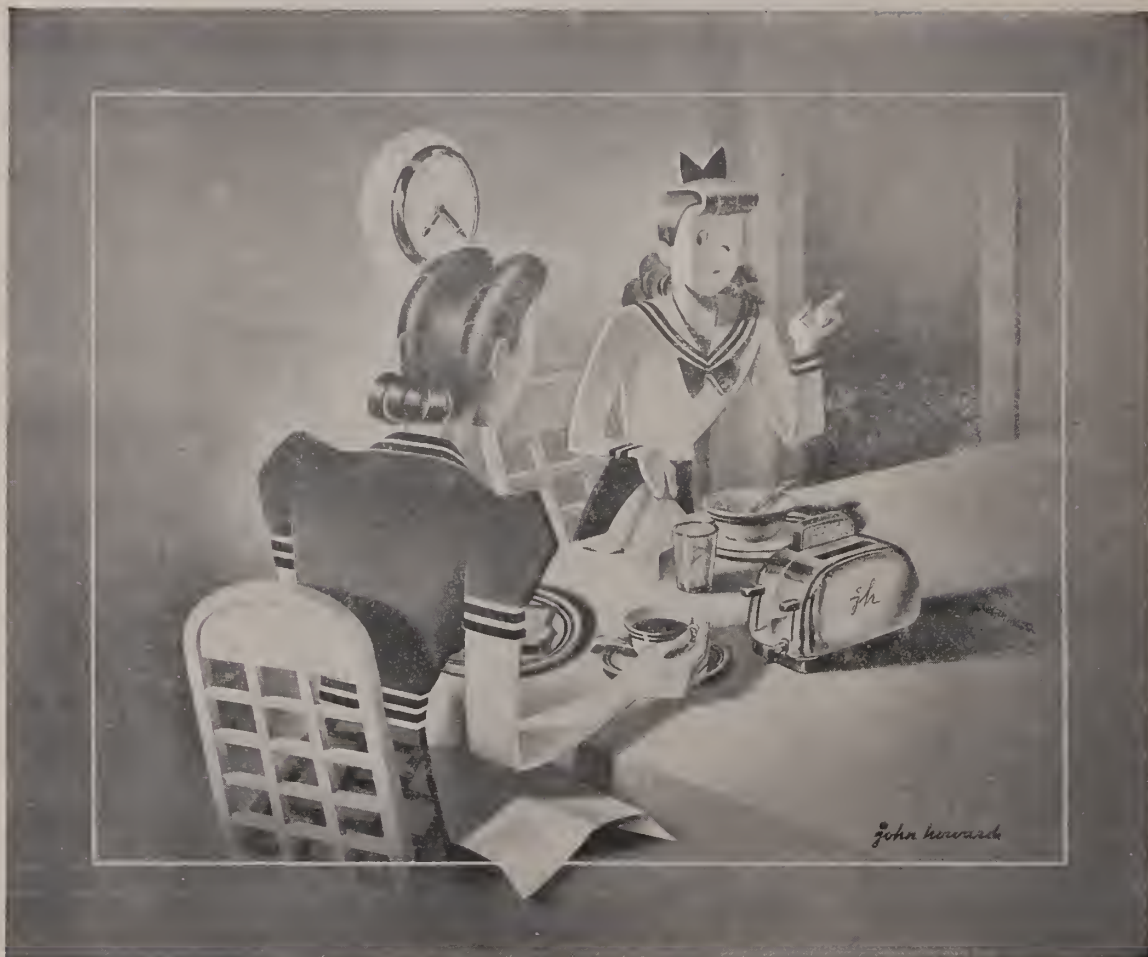
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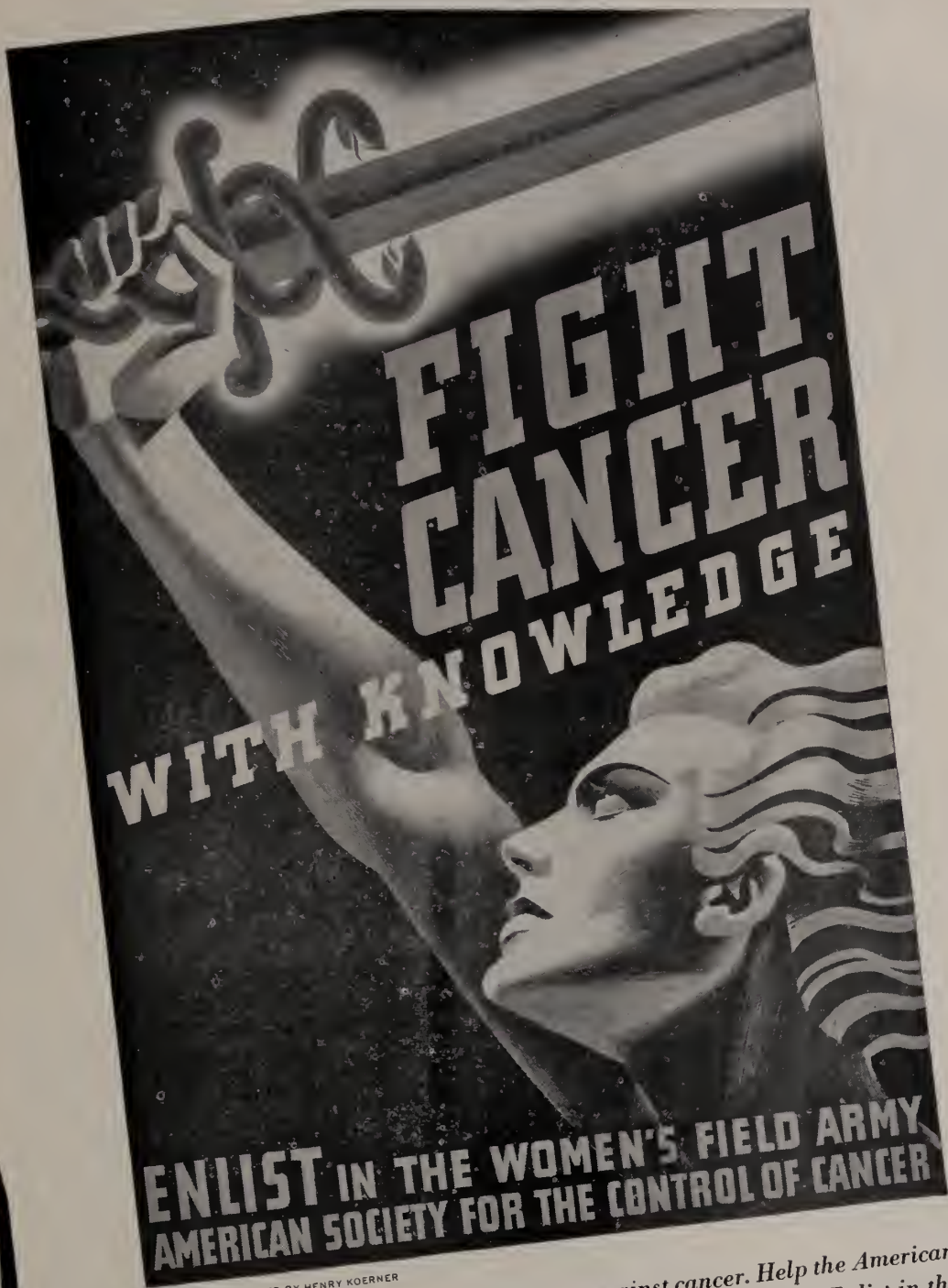
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John L. Cassidy, M. D.

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JAMES S. RICH, M. D., Roentgenologist

JOHN H. COMBS, M. D., Chief Anesthetist

JOHN A. GALLOGLY, M. D., Fellow in Surgery

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph. Gon. & Ven. Dis.*, 23, 201 (March) 1939.

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Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154— Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60

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## CALENDAR OF COUNTY SOCIETY MEETINGS

COUNTY	SECRETARY	RESIDENCE	DATE
Adair	Todd Jeffries	Columbia	April 2
Allen	A. O. Miller	Scottsville	April 23
Anderson	J. B. Lyen	Lawrenceburg	April 7
Ballard	F. H. Russell	Wickliffe	
Barren	Rex Hayes	Glasgow	April 16
Bath	H. S. Gilmore	Owingsville	April 14
Bell	E. S. Wilson	Pineville	April 11
Boone	R. E. Ryle	Walton	April 16
Bourbon	B. N. Pittenger	Paris	April 17
Boyd	Richard W. Gardner	Ashland	April 1
Boyle	P. C. Sanders	Danville	April 15
Bracken-Fendleton	W. A. McKenney	Falmouth	April 24
Breathitt	Philip Bross	Jackson	April 15
Breckinridge	J. E. Kincheloe	Hardinsburg	
Bullitt	George B. Hill	Mt. Washington	
Butler	D. G. Miller, Jr.	Morganown	April 2
Caldwell	W. L. Cash	Princeton	April 1
Calloway	J. A. Outland	Murray	April 3
Campbell-Kenton	W. B. Pearce	Covington	April 3
Carlisle	E. E. Smith	Bardwell	April 1
Carroll	H. Carl Boylen	Carrollton	April 8
Carter	Don E. Wilder	Grayson	April 8
Casoy	William J. Sweeney	Liberty	April 24
Christian	D. M. Clardy	Hopkinsville	April 15
Clark	R. E. Strobe	Winchester	April 18
Olay	L. H. Wagers	Manchester	April 8
Clinton	S. F. Stephenson	Albany	April 19
Crittenden	C. G. Moreland	Marion	April 14
Cumberland	W. F. Owsley	Burksville	April 2
Daviess	Irvin Bensman	Owenaboro	April 8 & 22
Elliot	W. H. Joyner (Acting Sec.)	Sandy Hook	
Estill	Virginia Wallace	Irvine	April 9
Fayette	D. E. Scott	Lexington	April 8
Fleming	Roy Orsburn	Flemingsburg	April 9
Floyd	J. G. Archer	Prestonsburg	April 30
Franklin	Thomas P. Leonard	Frankfort	April 3
Fulton	M. W. Haws	Fulton	April 9
Gallatin	J. M. Stallard	Sparta	April 17
Garrard	J. E. Edwards	Lancaster	April 17
Grant	Lenore Patrick	Williamstown	April 16
Graves	H. H. Hunt	Mayfield	April 1
Grayson			
Green	S. J. Simmons	Greensburg	April 7
Greenup	L. C. Bate	Greenup	April 11
Hancock	F. M. Griffin	Hawesville	April 7
Hardin	D. E. McClure	Elizabethtown	April 10
Harlan	M. W. Howard	Harlan	April 19
Harrison	W. B. Moore	Cynthiana	April 7
Hart			April 1
Henderson	J. Leland Tanner	Henderson	April 14 & 28
Henry	Owen Carroll	New Castle	April 10
Hickman	Layson B. Swann	Clinton	April 3
Hopkins	Wm. H. Garnier	Madisonville	April 10
Jackson	Mary T. Arnold	McKee	April 5
Jefferson	B. W. Smock	Louisville	April 7 & 21
Jessamine	J. A. VanArsdall	Nicholasville	April 24
Johnson	A. D. Slone	Paintsville	April 28
Knott			April 26
Knox	T. R. Davies	Barbourville	April 17
Larue			April 1
Laurel	Oscar D. Brock	London	April 9
Lawrence	L. S. Hayes	Louisa	April 21
Lee	W. D. McCollum	Beattyville	April 12
Leslie	John H. Kooser (Acting Sec.)	Hyden	
Letcher	T. M. Ferry	Jenkins	April 29
Lewis			April 21
Lincoln	Lewis J. Jones	Hustonville	April 18
Livingston	C. M. Fischbach	Smithland	
Logan	E. M. Thompson	Russellville	
Lyon	H. H. Woodson	Eddyville	April 1
McCracken	J. V. Pace	Paducah	April 23
McCreary	R. M. Smith	Stearns	April 7
McLean	Alan R. Will	Calhoun	April 10
Madison	Robert L. Rice	Richmond	April 17
Magoffin			

COUNTY	SECRETARY	RESIDENCE	DATE
Marion.....	W. E. Oldham.....	Lebanon.....	April 22
Marshall.....	S. L. Henson.....	Benton.....	April 16
Martin.....			
Mason.....	C. W. Christine.....	Maysville.....	April 9
Meade.....	S. H. Stith.....	Brandenburg.....	April 24
Menifee.....	E. T. Riley.....	Frenchburg.....	
Mercer.....	J. Tom Price.....	Harrodsburg.....	April 8
Metcalfe.....	E. S. Dunham.....	Edmonton.....	
Monroe.....	Geo. E. Bushong.....	Tompkinsville.....	
Montgomery.....	D. H. Bush.....	Mount Sterling.....	April 8
Morgan.....			
Muhlenberg.....	E. L. Gates.....	Greenville.....	April 8
Nelson.....	R. H. Greenwell.....	Bardstown.....	
Nicholas.....	T. F. Scott.....	Carlisle.....	April 21
Ohio.....	Oscar Allen.....	McHenry.....	April 2
Oldham.....			April 8
Owen.....	K. S. McBee.....	Owenton.....	April 3
Owsley.....	W. H. Gibson.....	Booneville.....	April 7
Ferry.....	D. D. Turner.....	Hazard.....	April 14
Pike.....	F. H. Hodges.....	Pikeville.....	April 1
Powell.....	I. W. Johnson.....	Stanton.....	April 7
Pulaski.....	M. C. Spradlin.....	Somersett.....	April 10
Robertson.....			
Rockcastle.....	Lee Chestnut.....	Mount Vernon.....	April 4
Rowan.....	A. W. Adkins.....	Morchead.....	April 14
Russell.....	J. R. Popplewell.....	Jamestown.....	April 14
Scott.....	A. Y. Covington.....	Georgetown.....	April 3
Shelby.....	A. D. Doak.....	Shelbyville.....	April 17
Simpson.....	L. R. Wilson.....	Franklin.....	April 8
Spencer.....			
Taylor.....	W. B. Atkinson.....	Campbellsville.....	April 10
Todd.....	B. E. Boone, Jr.....	Elkton.....	April 2
Trigg.....			April 30
Trimble.....			
Union.....	Bruce Underwood.....	Morganfield.....	April 1
Warren-Edmonson.....	W. O. Carson.....	Bowling Green.....	April 9
Washington.....	J. H. Hopper.....	Wilshburg.....	April 16
Wayne.....	Frank L. Duncan.....	Monticello.....	
Webster.....	C. M. Smith.....	Dixon.....	April 25
Whitley.....	C. A. Moss.....	Williamsburg.....	
Wolfe.....			April 7
Woodford.....	George H. Gregory.....	Versailles.....	April 3

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# KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

VOL. 39, No. 4

BOWLING GREEN, KY.

APRIL, 1941

## PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION

The American Medical Association advocates:

1. The establishment of an agency of federal government under which shall be coordinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American System of democracy.

## EDITORIALS

AN INQUIRY CONCERNING  
DR. WILLIAM TALBOT OWEN

The annual meeting of the Kentucky State Medical Association will be held September 29 to October 3rd, in Louisville and will be in honor of Dr. William Talbot Owen, who was President of the Association in 1858. Dr. Owen was the son of Dr. James Harvey Owen. In 1870 he was Professor of Theory and Practice of Medicine in the Kentucky School of Medicine. He married Miss Sarah E. Hoagland, of Hunter's Bottom, Kentucky. We have been unable to find further data regarding Dr. Owen and would like to secure a photograph of him. If any member of the Association who reads this article knows of any of his relatives or descendants, please get in touch with Dr. L. H. South, Business Manager of the JOURNAL. His former residence was located at 622 First Street, Louisville.

## A DISTINGUISHED GUEST

Kentucky is extremely fortunate to have as one of its guest speakers at the annual meeting, the President-Elect of the American Medical Association, Dr. Frank H. Lahey, of the Lahey Clinic, Boston. Many of the members will remember with a great deal of pleasure his lecture before the Association on the Management of Lesions of the Colon and Rectum, which was illustrated by colored motion pictures.

Dr. Lahey promises this time to be more at leisure and take part in the discussions and be present throughout the entire meeting.

This is one of the several speakers of national importance that the Committee on Scientific Work, of which Dr. James A. Pritchett is Chairman, has secured. Any paper that you wish to discuss or hear discussed, please communicate with the Chairman.

## PREMARITAL TESTS

Serological tests for syphilis, if they are to meet the requirements of the Kentucky Premarital Law, which became effective January 1, 1941, must be made in laboratories approved by the State Commissioner of Health. A list of laboratories approved as of December 31, 1940, together with a detailed discussion of the method

of approval and the general problems connected with administration of the law, was published in the March issue of the JOURNAL. This issue should be bound and kept in every doctor's office for ready reference in case of doubt about the provisions of the statute.

It is gratifying to know the extent to which physicians throughout the state are supporting the approved private laboratories, all of which have the scientific equipment and the trained technical help necessary to render the best service possible.

During the month of January 1941 an aggregate of 2,996 applicants for marriage licenses were given serological tests for syphilis under the provision of the Premarital Law. Of these, a total of 52 were found to be infected. This is a positive rate of 17.4 per 1,000 or 1.74 per cent. In the approved private laboratories, 1,700 negative and 23 positive tests were made, giving a positive rate of 13.50 per 1,000 or 1.35 per cent. Dr. L. H. South, Director of the Bureau of Bacteriology, reports that the State Department of Health Laboratory examined 1,234 negative specimens and 29 positive specimens. This gives a positive rate of 23.20 per 1,000 or 2.32 per cent.

All approved laboratories are under constant supervision to insure their standards of efficiency are kept up to the requirements of the American Medical Association and the National Serodiagnostic Committee for Syphilis of the U. S. Public Health Service.

It is important to remember that no laboratory report of a test made under the requirements of the Premarital Law is legal unless it is signed by a licensed physician, and that every approved laboratory must be under the control and supervision of a practicing physician. The law also requires that all such reports shall be confidential and must be sent, either by mail or by messenger, in a sealed envelope to the physician requesting the examinations. Under no conditions may these reports be given by telephone, and it is useless to request the State Department of Health or any approved private laboratory to make an exception to this regulation.

To avoid delay in receiving reports it is essential that the history slip accompanying a specimen be filled out completely and the name and address of the physician written in a legible manner. Delays in receiving reports are usually due to lack of complete and accurate information on the history slips.



## PAY YOUR DUES

This is the last number of the JOURNAL which you will receive if you have neglected to pay your dues by the end of the current month.

The postal authorities require deletion from the subscription list of the names of all physicians whose dues are delinquent on April First.

It should also be remembered that the Constitution and By-Laws of the Association provide that only members in good standing as of this date are entitled to the Medico-Legal services of the Association in case of need.

Because of the many problems confronting the medical profession as a result of the national defense program, the JOURNAL and membership in the state organizations mean more to the profession today than ever before in its history. The forthcoming issue of the JOURNAL will carry discussions of some phases of these many problems, together with news of the program for the next annual meeting.

See your secretary immediately and continue, by paying your dues now, the support you have always given to organized medicine.

## AN EXCELLENT LAW JUSTIFIES ITSELF

The JOURNAL takes pleasure in reproducing an editorial which appeared under the above caption in the March 2nd issue of the Courier-Journal, Louisville.

"Kentucky's new law requiring health certificates as a prerequisite of marriage already has paid a handsome dividend. In the first month of its operation, fifty-two prospective brides (or grooms) have been saved from the blighting effects of union with syphilitics.

These fifty-two, it is true, represented only a handful among the 3,062 who sought marriage licenses. But suppose even this low January result should be maintained throughout the year. That would mean that more than 600 syphilitics would have been prevented from taking wedding vows.

It doesn't take much of an imagination to picture what this means to future generations, because one of the scourges of syphilis is that it twists the bodies and deforms the brains of babies yet unborn.

We cannot restrain a vivid interest in that phase of Dr. McCormack's report which stressed that only half as many marriage licenses were issued in January, 1941, as compared with January, 1940.

Part of the explanation for this extraordinary decrease probably lies in the cost of premarital tests, and that means (as this newspaper has often urged) that they must be made cheaper, and placed within the easy reach of every one.

But there may also be another explanation. It might very well be that many persons who knew that they were afflicted with venereal disease did not dare seek a license in Kentucky. These, of course, either had to go elsewhere, or refrain from marriage altogether. And we hope they did the latter.

Yes, the new law has justified itself on all counts."

The State Department of Health laboratory and the approved private laboratories throughout the state are doing their best to facilitate administration of the premarital law by rendering the quickest possible service in connection with the serological test required under this statute.

## N. C.—N. R.

We have received a very practical suggestion from one of our most influential members, Dr. H. H. Roberts, of Georgetown, that physicians have their prescription blanks printed with N. C. or N. R. on all of them. This would instruct the druggist that the prescriptions were not to be copied and not to be refilled.

Dr. Roberts has pursued this practice for some years and says that it is entirely satisfactory to him and to the pharmacists. We desire to re-emphasize the importance of a mutual understanding both within our profession and with the pharmacists and suggest that a joint meeting be held for the clarification of the problems involved in the new law and other matters where joint action of the two groups would give more satisfactory protection to the public as well as to ourselves.

We are still hoping that the time will arrive when every physician will read the Journal of the American Medical Association and thereby continue his learning on the new chemotherapy and materia medica from authorities who know what they are talking about rather than from detail men who have learned to repeat by rote any interesting and frequently misleading sales talk.

Therapy will be of increasing value when it has as a foundation sound scientific knowledge. We feel that it is essential that this branch of medicine be dignified so that it will be considered of as much value by the student and the practitioner as diagnosis.

## RECENT ADVANCES IN TROPICAL MEDICINE

Elsewhere in this issue of the JOURNAL we are publishing an outline of a course offered in Tropical Medicine. Many of the best known authorities in their respective fields will give lectures and demonstrations. With the present rapidity of travel, patients from the jungle of the world, afflicted with some unrecognizable disease contracted in the tropics, may reach your office within a few days.

This course is given in concise, condensed form and is designed to bring to the physician a review of the fundamentals of the various subjects in tropical medicine together with the more recent advances that may come from research. To be familiar with the subjects may well prove a profitable investment.

### OFFICIAL ANNOUNCEMENT

#### PEDIATRIC POST GRADUATE INSTRUCTION

APRIL 23-JUNE 25, 1941

A Postgraduate Course of Instruction in Diseases of Children will be held at the Children's Free Hospital, Louisville, beginning Wednesday, April 23, 1941, and continuing each Wednesday for ten weeks from 9 A. M. to 1 P. M.

One hour will be spent each week in a discussion by the Staff of all interesting cases in the Hospital. All the newer methods of treatment by transfusions, lumbar and cisterna puncture, hypodermoclysis, peritoneal injections, syphilis, etc., will be demonstrated on patients. Lectures will be given on many of the puzzling problems in diagnosis and treatment, but such other questions as may be suggested will also be discussed. The Staff will be composed of Drs. Philip F. Barbour, J. W. Bruce, J. H. Pritchett, Lee Palmer, W. W. Nicholson, Frank A. Simon, Winston U. Rutledge, J. Keller Mack, Margaret Limper, H. S. Andrews, W. B. Troutman, J. J. Glaboff, J. S. Bumgardner, Franklin Jelsma, William Keller, Oscar Miller, D. Y. Keith, and Joseph Hamilton.

Further inquiries should be sent to Dr. W. W. Nicholson, Heyburn Building, Louisville. A nominal charge of \$5.00 will be made for the entire course. A certificate will be issued if desired. The program will be given as follows:

#### APRIL 23

- 9-10 Clinical Observation of Children  
Philip F. Barbour
- 10-11 Weekly Conference  
Philip F. Barbour
- 11-12 Management of Communicable Diseases  
Jas. H. Pritchett
- 12- 1 Management and Treatment of Deficiency Diseases  
Lee Palmer

#### APRIL 30

- 9-10 Therapeutics in Children  
W. W. Nicholson
- 10-11 Weekly Conference  
J. W. Bruce
- 11-12 Neurosurgical Conditions in Children  
Franklin Jelsma
- 12- 1 Allergy in Children  
Frank Simon

#### MAY 7

- 9-10 Gastro-Intestinal Toxemia  
H. S. Andrews
- 10-11 Weekly Conference  
J. Keller Mack
- 11-12 Diagnosis and Treatment of Syphilis in Children  
J. J. Glaboff
- 12- 1 X-Ray Findings in Children  
D. Y. Keith

#### MAY 14

- 9-10 Bronchoscopy in Children  
J. S. Bumgardner
- 10-11 Weekly Conference  
J. J. Glaboff
- 11-12 Growth and Development  
J. Keller Mack
- 12- 1 Care of the New Born  
Margaret Limper

#### MAY 21

- 9-10 Management of Diabetes  
J. W. Bruce
- 10-11 Weekly Conference  
H. S. Andrews
- 11-12 Abdominal Pains  
Philip F. Barbour
- 12- 1 Laboratory Methods  
J. J. Glaboff

#### MAY 28

- 9-10 Common Skin Diseases in Children  
W. U. Rutledge
- 10-11 Weekly Conference  
Margaret Limper



## 11-12 Management of Meningitis in Children

Jas. H. Pritchett

## 12- 1 Poliomyelitis and Encephalitis

Lee Palmer

## JUNE 4

## 9-10 Anemia in Infancy and Childhood

J. W. Bruce

## 10-11 Weekly Conference

Philip F. Barbour

## 11-12 Management of Pyuria in Children

J. Keller Mack

## 12- 1 Lead Intoxication

Margaret Limper

## JUNE 11

## 9-10 Chemotherapy in Childhood Pneumonia

H. S. Andrews

## 10-11 Weekly Conference

Lee Palmer

## 11-12 Children's Problems

William Keller

## 12- 1 Childhood Tuberculosis

Oscar O. Miller

## JUNE 18

## 9-10 Infant Feeding

W. W. Nicholson

## 10-11 Weekly Conference

Jas. H. Pritchett

## 11-12 Heart Diseases in Children

W. B. Troutman

## 12- 1 Management of Burns

Joseph Hamilton

## JUNE 25

## 9-10 Emergencies in Childhood

J. W. Bruce

## 10-11 Weekly Conference

W. W. Nicholson

## 11-12 Immunization

Jas. H. Pritchett

## 12- 1 Endocrine Disturbances

Philip F. Barbour

---

**Treatment of Psoriasis.**—Incedayi and Ottenstein investigated the cholesterol metabolism in three cases of psoriasis. In view of the fact that recent opinions localize the disturbance in the lipid metabolism not only in the liver but also in the adrenals, the authors decided to try treatment with a preparation of adrenal cortex in combination with a diet that was deficient in potassium. The effect was surprisingly favorable in all three cases. However, no conclusions concerning the etiology of psoriasis can be deduced from these observations.

## TREATMENT OF PARESIS IN THE HOME

LOUIS M. FOLTZ, M. D.

Clinical Director, Central State Hospital

Lakeland

Until recently most of us have felt that the treatment of paresis outside the state hospitals or general hospitals, where the chief of staff makes regular ward rounds with experienced men, was a very poor practice, and that anyone trying to give malarial therapy in the home was stepping out of his field, so to speak, but we saw men were carrying the procedure out despite warnings and fatalities. I felt that there must be something that we could do to prevent the fatalities and also help the men treat properly. I investigated over twenty-five cases that were being treated in the home at the courtesy of the men treating the cases. On thorough investigation I found some very competent and thorough treatments going on, and conducted as well as in most, and probably better than in some state hospitals. The watch word as far as I could see was an honest desire to treat properly. Those who were not interested in the patient primarily and did not take it upon themselves to delve into the methods and techniques of this type of treatment got into a great deal of difficulty and should not have been carrying on the treatment, however, the man who was honest with himself and investigated thoroughly was early to seek consultation and did good and commendable work. So in this respect if I could contribute just a little to help along with the proper methods, techniques and precautions, placing these available in a clear, simple, concise form, perhaps those using this treatment could benefit thereby.

Just a sentence to explain the patient's standpoint of not going to the hospital. He is prone to be better satisfied in his home, he feels no psychic trauma; his family feel that a stigmata is placed upon him if he goes to the state hospital; he has a great deal of confidence in his family physician and just on his family's convictions they want him to remain in the protection of their home.

Therefore, let us make this a clear issue—first, all cases by preference should be sent to a qualified hospital for treatment; second, complicated cases must be sent; third, only those selected cases that are clearly

uncomplicated and honestly easy to handle should be treated at home; fourth, the physician must make himself acquainted with the procedure before undertaking the responsibility; fifth, he must be willing to call in consultation when indicated.

Most papers delve into the historical phases of the subject, however, I feel that we should spend more time on this subject proper.

We must endeavor to be as clear and exacting in the choice of the patient as possible. Most authorities feel that treatment of neurosyphilis by inoculation with malaria is a specialist's work and dangerous when undertaken by the inexperienced or without organization and facilities. We must not forget that there are many, as well as a formidable, array of complications in this form of treatment, especially when applied to a difficult or a damaged material. Of necessity the physician must be honest in choice of patient. If you know that the patient has any visceral infection, is debilitated, has an arrested pulmonary tuberculosis, the case should not be handled outside a mental hospital or one allocated to such treatment. In other words any cases that we feel will have resulting complications are cases to send to the state hospital.

The treatment can readily be divided into three stages; first, the pre-inoculation period; second, the febrile period; third, the post malarial therapy period. In regard to first stage, of first concern is necessarily the diagnosis of the case. This brings to the foreground the fact that any patient who has a positive Kahn who has been treated or is being treated should necessarily have a spinal fluid examination. My next statement is still a controversial one, however, it is felt that a spinal fluid examination should be done every six months following the knowledge of syphilis being present in the individual. There are many views on an early positive spinal fluid for syphilis. I will not go into these at present or into the methods of handling those cases. I will assume at this point that we have diagnosed our patient as one having paresis.

The choice of the patient is of great import as I have stated before. A complete and thorough physical examination should be done before we even go so far as to suggest malarial therapy. In this examination we should note especially the cardiovascular system, the urinary system and the neurological system. An eye ground examination should be done, a complete

urinalysis done—noting especially the presence of sugar and albumin, a red blood count and haemoglobin must be done before treatment is started. (2) If any of the following contraindications exist, the patient should automatically be sent to an institution fitted for such treatment:

1. Poor physical status, debility.
2. Moderately or far advanced malignancy.

3. Age limit of forty-five years. We arrived at this age limit because from experiences and statistics we find that those individuals over that period are necessarily poor risks on the average. Of course, there are a few exceptions to this, but I do not feel that it is justifiable to take care of a new patient older than forty-five.

4. A definite cardio-vascular disease, especially coronary, myocardial, or arteriosclerosis. This is one of the greatest contraindications. The cases with this contraindication are very, very poor risks.

5. Pulmonary tuberculosis, arrested or active. We note that arrested cases of pulmonary tuberculosis are often flared up by this type of therapy.

6. Chronic alcoholism. This in itself is not necessarily a contraindication, however, in the majority of instances these individuals have a great deal of liver damage and other visceral disease entities which make them a relatively poor risk. They get along well in state hospitals where we can be constantly in touch with them.

7. Marked diabetes. By this I mean a diabetic who is quite hard to control and needs large amounts of insulin to keep him stable. The less severe cases are easily handled with insulin therapy along with the fever therapy. We note that the high temperatures cause a rise in blood sugar, and, therefore, this must be watched constantly, and if this contraindication is present in a more severe form we must have available the facilities to do blood sugars, glucose tolerance tests and urine sugars, quantitative as well as qualitative.

8. Anaemia. A red blood count that goes below 3,500,000 should not be undertaken for home therapy. A haemoglobin of nine and a half grams is also a contraindication. These cases if no other contraindication presents itself should be built up with tryparsamide therapy and bismuth and anti-anaemic substances before inoculation malaria.

9. Advanced tabes with severe ataxia. These cases invariably develop marked decubiti and are generally very poor risks.



10. Decubiti (pressure sores) are generally very sure to become infected and with the resulting infection, death ensues. They are very difficult to care for, even with a well staffed hospital.

11. Pregnancy. This necessarily in itself is a contraindication.

12. Kidney disease.

13. Hepatic disease. This necessarily is a contraindication since the liver plays such an important role in the metabolism and sugar balance of the body mechanisms.

Now if you feel sure you have chosen a patient that will not give us too much difficulty we can go on planning the treatment. If you are not sure it would be well to call in consultation on the case and save yourself difficulties later. Be sure to test patient's sensitivity to quinine. Quinine idiosyncrasies recognized by severe nausea, vomiting or diarrhea, skin eruption, ringing ears, dizziness, deafness, impairment of vision. To test patient's reaction to quinine inject intracutaneously 0.1 c. c. of a 1 per cent solution of urea quinine hydrochloride. A marked urticarial wheal occurring at site of injection is typical of quinine sensitivity.

The items necessary for malarial therapy are those that the physician needs for his examination, laboratory work as indicated above, and available apparatus for giving subcutaneous fluids. As far as the patient is concerned he should have a room that he is to use alone; a thermometer, rectal; finances enough to procure fruit juices, cod liver oil, iron and vitamin preparations; blankets, hot water bottles and ice, and someone who can be in constant attendance of the patient; some type of graphic chart where the temperature can be taken every four hours and every fifteen minutes while patient is having a rising temperature and a chill.

The necessary blood for the inoculation can be procured through the state hospital in your vicinity. It can be shipped, sent by air mail or regular mail, and is fairly certain to be in good condition when it arrives. If you are some distance away from the hospital you can write a letter to the superintendent who will immediately send you the blood. If close by you can call and make arrangements to bring the patient to the hospital or go to the hospital and procure the blood with the assistance of one of the physicians on the staff, (5 c.c. of the malarial blood is necessary). This is usually given intravenously in the usual manner and technique for in-

travenous administration. It may be given subcutaneously. This prolongs the incubation period which for intravenous route is generally four to five days, may be as high as twenty; subcutaneous route, seven to fourteen days; intracutaneous as high as thirty days. If the blood is transported .5 per cent sodium citrate solution is added to the blood in equal quantities. The hospital will be glad to furnish this material.

The next most important item to be considered is to have every available modern method of care at hand and the treatment outline well organized so that at no time will we be in doubt as to the next step. A well thought out program will give you much confidence and ward off any difficulties later.

In this respect we must pick out some individual in the family who will be most competent to look after the patient. In this same light it is often valuable to seek out the most interested person and if the member of the family being treated is the husband, oftentimes his mother will be quite willing and anxious to help. Whether it's the mother, mother-in-law, sister or brother, be sure to pick out the individual who is most interested because it takes an interested party to carry out the proper procedures.

After the patient has been selected and the possibilities of the patient's improvement and recovery discussed with the family, it is well to bring to their attention the fact that there are many complications that may arise and always keep them informed step by step of the intended and actual treatment. It should be explained to the relatives that a remission is a likely possibility and they should be warned of the probability of a flareup of symptoms in the more excited type of case when treatment is first instituted. A mention of suicide must always be made and a guarded prognosis the rule.

In the febrile period we secure the blood as outlined previously, inoculate the patient, preferably the intravenous method, explain to the family the incubation period may run from four to twenty days, generally around five to seven; patient being allowed up and around, being on a high caloric diet until the first sign of his running any temperature appears. Pre-pyrexial rise in temperature during the incubation period may occur in paretics or temperature may be normal or sub normal. It should be taken every three hours throughout entire course, from inoculation to ter-

mination of malaria. Occasional slight improvement in the mental condition of the patient may appear in the incubation period. Before the onset of the typical attack the patient feels out of sorts, with headache and neuralgia, and when the rigor develops he usually looks progressively worse, the lips are cyanosed and the extremities cold. When the patient shows either of foregoing, he is immediately put to bed and temperature taken every fifteen minutes until the lowest temperature after the peak is obtained. The violence of the chill is sometimes astonishing and the duration varies from a few minutes to two hours or more, averaging less than an hour. While the patient is still shivering the temperature begins to rise. The patient is more comfortable, but presently his skin becomes dry, the face flushed and the head throbs. After temperature reaches its maximum it is followed by sudden decline and profuse sweating occurs. Marked variation in individual cases occurs. The temperature should not usually reach its maximum with the first attack and there may be one or more milder and somewhat irregular rises before the fever settles into the typical tertian swing. A temperature of one hundred and six degrees F. is the maximum for safety. If temperature reaches this peak it is well to give cold baths and apply ice caps to the head. This not only makes the patient more comfortable but also guards against a too high temperature. When the rectal temperature falls to one hundred and two degrees F. and anti-pyrexial methods may be discontinued but the effect is usually only temporary and hydrotherapy must be repeated. The rule of Rudolph giving the three sixes, one hundred and six degrees F. temperature, one hundred and sixty pulse rate, and sixty respiration rate, is the one to be observed for safety. When the patient begins chilling he should be covered with three or four blankets and hot water bottles placed between the blankets, not next to the patient. Patient is allowed as much tap water as he will take. If he does not take much he should be forced to ingest at least four or five eight ounce glasses full during the course of his rise in temperature. This procedure is carried out for each paroxysm. During intervals temperature is taken every three hours. The course of malarial therapy should be followed by the physician very closely—see the patient at least once a day, preferably twice. In the uncomplicated cases having rises in

temperature every other day be aware of dehydration, decubital ulcers, any infection—visceral or peripheral. To prevent dehydration of patient it is well to have the attendant measure the amount of fluid intake as well as the urine output. These, of course, should correspond quite closely. If the fluid intake is low the patient will easily become dehydrated and much more prone to have a stormy course. It is well to see that the patient takes at least three thousand c. c. of fluid over a 24 hours period, preferably more than this. If the water balance becomes abnormal we must be equipped to investigate the urinary tract. To prevent decubital ulcers patient should be turned frequently, given baths, alcohol rubs and powdered with talcum; the sheets should be kept smooth—without wrinkles, and very clean; the oftener the sheets can be changed the better. In so far as infection goes we must turn the patient frequently to prevent pneumonia. The bladder must be observed to see that it does not become distended since once the bladder is distended the wall is weakened and infection is the rule. The blood pressure should be taken at the trough of the temperature curve. This is one of the best indicators as to patient's condition along with the red blood count and haemoglobin. If the blood pressure drops below eighty systolic it is a very grave sign and means that the patient is in a very weakened condition, that the heart muscle is not functioning properly, and the case should be gone over thoroughly to find any complications developing. If the blood pressure remains at this point for twelve hours it is well to stop the malarial therapy immediately by use of intravenous quinine hydrochloride. If you have previously determined that patient is sensitive to quinine it is well to stop the malaria with an intravenous injection of neoarsphenamine. If the red blood count, another index which tells us very accurately the patient's reaction to malaria parasites, should drop below 2,500,000, with a haemoglobin below nine grams, the therapy should be immediately stopped with either of the above mentioned methods. Should the patient become dehydrated despite your efforts it certainly is indicative that he is not getting enough water, therefore, you should make an issue of the matter and see that patient is taken care of properly—again going over your schedule with the nurse. Subcutaneous fluids may be given very easily in the home by means of the various solutions that are now on the market in



sterile containers, etc. During the entire course of the malaria therapy we must see that the patient has a light nutritious diet along with various supportive measures, such as plenty of fruit juices, the vitamins in the form of cod liver oil, brewer's yeast, etc., plenty of fresh vegetables well cooked and prepared. In other words the dietary regime is a most important factor in these cases. Special attention must be given to elimination. Enemata are preferred to cathartics. If the paroxysms are too frequent, in other words occurring more than every other day, and the patient is noticeably becoming weaker he should be given an injection of sodium thiobismal in three grain doses, with injection intramuscularly. After giving him a five day rest the malaria will again resume itself and the regular tertian swing will again set in.

Now in so far as complications occur, the blood and urine should be examined three times weekly. If there is a rapidly progressing anaemia the paroxysms should be stopped. An albuminuria usually develops toward the end of the siege and glycosuria may be present, but is usually without significance. The mild jaundice that may develop may indicate hepatic disease but is usually without significance. There are many opinions concerning this, however, we must remember that close observation of the patient is always a rule and if possible, an icterus index can be taken once a week and any reading above fifty should call for a termination of the paroxysms.

Pulmonary complications constitute an important group and by some men rated as responsible for eleven per cent of the deaths after fever therapy. There are three types—edema or pulmonary congestion secondary to cardiac insufficiency, bronchitis, broncho or lobar pneumonia, and focal lighting up of pulmonary infections already present, including tuberculosis. Rudolph, who has done a great deal of work with this treatment, considered the respiratory rate of sixty as evidence of pulmonary embarrassment, and as an indication of immediate termination of the siege. Other focal infections that may be encountered are arthritis, not a necessary contraindication; renal complications by some men thought to be uncommon, by others, very common, generally are serious if due to a distended bladder, causing backing of urine with catheterization, resulting in infection. We feel that once a catheter is

inserted into the bladder it should remain in as a retention catheter with frequent bladder irrigation. Myocardial failure may present a sudden rapidly progressing drop in strength or may show a typical myocardial collapse with a rise in pulse rate, edema, or with cyanosis, pallor, etc. During the siege it may be necessary to use morphine or hyoscine as sedatives. The length of the siege should vary according to condition of patient from seven to ten chills with fever, average of eight. To stop the malaria ten grains of quinine three times a day for ten days, and ten grains once a day for fourteen days.

The following conditions are deemed to be indications for termination of the malaria.

1. Continued hyperpyrexia, refractory to sponging, etc.
2. Shock, extreme exhaustion between chills, foreshadowed as a rule by extreme restlessness and insomnia, rapidly falling blood pressure, etc.
3. Convulsive seizures, particularly when generalized.
4. Tabetic crises, lightning pains, etc.
5. Rising urea nitrogen in the blood.
6. Hemorrhage from mucous membrane or in skin (purpura).
7. Jaundice, not to be confused with icterus due to anaemia.
8. Cellulitis, developing about abrasions, bed sores, etc.
9. Bronchopneumonia.
10. Acute splenitis, large, firm, tender spleen.
11. Cardiac decompensation, characterized by thready pulse, cyanosis, oedema, basal pneumonia.
12. Severe anaemia, haemoglobin below nine and one-half grams, red cell count below 2,500,000, marked leukopenia.
13. Sudden overwhelming increases in parasites in blood.
14. Stupor, between chills.

The use of digitalis and other so-called "cardiac tonics" as prophylaxis against circulatory failure during malaria is found by us to be of little or no value, however, it certainly should be used when the heart condition indicates such, however, be sure to mark the fact that the only safe and effectual treatment for the failing heart in malaria is prompt termination of the malaria.

(5) Post malarial care. The patient is placed upon a high caloric diet with such anti-anaemic drugs given as indicated. Physical rehabilitation is pushed as rapidly

as possible. The administration of tryparsamide or neoarsphenamine, is begun at once.

All reference to the term "cure" is avoided and the patient is impressed with the necessity of a prolonged period of continuous medical supervision. Many patients do not derive full benefits from malaria until several months have passed.

The drug sold as tryparsamide has been found by most men to be particularly effective in post malarial therapy. It is more highly diffusible and decidedly less toxic than other arsenical preparations, although its efficiency as a spirocheticide is comparatively low. This drug is given intravenously in doses of three gm. in ten c. c. of sterile water on an average of once a week. This should be continued for six months after which time a clinical and serological recheck should be made, then four months of bismuth subsalicylate .26 grams once weekly, plus potassium iodide grams 15, 3 times daily, and then two months of neoarsphenamine .6 grams weekly. This brings us to one year of treatment post malarial, marking the time for a clinical and serological recheck. The second year we should have a repeat of the first year's procedure, the third year we should have a repeat of the first year's procedure, the fourth and fifth years repeat procedure of first year if indicated. Clinical and serological recheck every six months for five years at least should be carried out. A rest period of one to three months could be given after the first and second years if indicated. A minimum of two to three years must be the rule and average time length is three to five years. If the patient shows no clinical improvement or serological improvement after six months of therapy it is believed by many men an indication to seriously consider discontinuance of chemotherapy. Repetition of malarial therapy would be well.

During this form of treatment special consideration must be given to the eyes since in rare instances the drug becomes toxic to the optic nerve, causing complete or partial amblyopia, particularly when there is profuse damage to the optic tract. We must control the administration of tryparsamide with frequent ophthalmoscopic examinations, visual field determinations, and perhaps above all else, to inquire carefully of each patient for symptoms of disturbances of vision. Any complaint of spots before the eyes, dimness of vision, etc., is indication for immediate ces-

sation of use of the drug. In these cases substitute the neoarsphenamine, bismuth and potassium iodide as we would in any other form of syphilotherapy.

#### CONCLUSION

1. Paresis can be treated at home.
2. By selecting the patient well and eliminating all possible contraindications, the physician will assure himself of little or no difficulty.
3. The physician must be thoroughly interested in his patient and give more than the average amount of time to his patient during the therapy period.
4. The physician must follow through by giving postmalarial treatment as outlined.

#### DISCUSSION

**Hugh R. Leavell:** We are much indebted to Dr. Foltz for discussing this subject and putting into the hands of the average practising physician a very useful procedure and taking some of the mystery out of this treatment of syphilis.

I want to mention one thing, i. e. there might be the danger of transmitting malaria if these patients are not guarded against mosquitoes. One might want to keep that in mind. There are anopheline mosquitoes in this area, and even more in Western Kentucky.

**John D. Campbell:** I think this has been a very good paper. I came up here inclined to differ with Dr. Foltz's method of treating paresis in the home. Since he has mentioned all the contraindications and a lot more than I thought about, I am inclined to agree with him. I think Dr. Foltz covered complications perhaps even a little too thoroughly. Paresis can be treated in the home, especially those cases caught early enough and with the cooperation of the patient as well as the family.

Dr. Foltz did not have time to go into a discussion of diagnosis of syphilis of the central nervous system, a subject which should be mentioned in a discussion of paresis. We see neurological symptoms attributed to syphilis before serology is done. If there is a paralysis of one of the eye muscles, for instance, you can't decide that is due to syphilis unless you do a spinal fluid examination. That is an important point. In one instance I saw a patient treated with malaria who did not have syphilis of the central nervous system.

It is important to know that before the use of hyperpyrexia all paretics died within five years. Now, you can do some good. If you keep these patients out of the state hospital you are doing good.

Another thing, the patient may be very active and troublesome. If you can give him malaria, once you get a mental patient physically ill, he



will improve mentally. In a great many cases you can depend on that.

Another thing, the malaria you give these patients is easy to cure. This is a mild disease compared to real old-fashioned malaria. Dr. Leavell mentioned that should it go back to the mosquito it becomes real malaria again.

The follow-up of patients is important, not so much the Wassermann, which is like it was and quite often it will stay that way for five to ten months. The cell count is probably the most important laboratory item in keeping a check on the progress of the disease.

Another thing about complications. A man who has been practising medicine and has treated pneumonia, nephritis, etc., need not be afraid of complications in paresis. He is dealing with sickly material and whatever he does is going to be good, if he gets any improvement at all. It is important to make the diagnosis early if possible as the early cases give the best results.

**Louis M. Foltz**, (in closing): I want to thank the discussors for their kindness.

Dr. Leavell brought out a very important point. The important point about the transmission of malaria, as used in the state hospitals, is that we use the asexual form of parasite and this is not readily transmissible through the mosquito even though it is anopheline in form. However, it happens rather infrequently and it must be something to guard against.

I am sorry I did not have time to discuss complications. As Dr. Campbell pointed out, the general practitioner can easily handle them. I would like to stress the point that paresis can be treated in the home if the physician is honest and careful in the treatment and if he makes an effort to investigate the technique of procedure.

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**Strychnine in Poisoning with Barbituric Acid Compounds.**—Lenero reports encouraging results from large doses of strychnine in more than 100 cases of acute poisoning with barbiturates. The treatment should be commenced as early as possible in doses of 200 mg. for the first two hours, up to a total of 1,300 mg. for the first twenty-four hours. The drug is administered intravenously in isotonic dextrose solution. The acuteness of the condition when the victim is first seen, are abnormalities of the viscera, pregnancy and the presence of associated poisoning do not contraindicate its use. The degree of saturation with the drug in the course of treatment is appreciated by the Chvostek sign. The author concludes that strychnine in large doses should be resorted to immediately in cases of barbituric coma, as well as in accidents during administration of evipal soluble and similar barbituric anesthetics.

## CONGENITAL PYLORIC STENOSIS

ULY H. SMITH, M. D.

Louisville

Congenital Hypertrophic Pyloric Stenosis has long been recognized. According to Knox(1), it was first mentioned as far back as the Revolution (1777), and again during the Washington term of Presidency (1788), when it was described in detail, together with the necropsy findings. More than fifty (50) years later, Williamson, an Englishman, in 1841, described a "Scirrhus of the Stomach, probably Congenital." From time to time the literature made references to an obscure stomach disorder observed in early infancy, characterized by projectile vomiting. No description of tumefaction was reported until 1896, Hirschsprung (1887) gave to the lesion our present day conception of it.

Several theories have been presented in an effort to explain the cause of the lesion, however, nothing definite is actually known. The condition is encountered more frequently in boy babies; the ratio being about 4 to 1. It occasionally occurs in more than one child in the same family, and twins have been reported to have been similarly affected.

A typical case required no unusual skill in diagnosis. A newborn, who, otherwise normal, is seized with attacks of projectile vomiting on or shortly after the 10th day of its existence, presenting visible peristaltic waves originating in the left upper quadrant of the abdomen, passing transversely to the right and disappearing under the liver, these waves being observed shortly before vomiting occurs, the vomitus never containing bile, must be regarded as a victim of Congenital Pyloric Stenosis. Too infrequently the physician does not see the baby at quite so early a period in the disease. Usually the symptoms have continued for several days, at times even weeks, before a physician is called. By this time the infant has developed a palpable mass in the right upper abdominal quadrant and further substantiation for diagnosis is not required or the infant has become sufficiently emaciated, dehydrated and feverish to render his condition precarious and in the absence of a palpable tumor the physician is confronted with the problem of differentiating among several possible conditions, viz; Congenital pyloric stenosis, pylorospasm, duodenal adhesions, gastroenteritis and allergy. For the time he may well disregard diag-

nosis and direct his attention to overcome dehydration and supply nutrition. Subcutaneous saline and glucose solutions and frequent small blood transfusions are indispensable.

The most common condition, which simulates Congenital Pyloric Stenosis and from which it must be distinguished is Pylorospasm. Atropine Sulphate, if given in sufficiently large doses to produce physiological effect, is of inestimable value. Bauer (2) uses homatropine hydrobromide in 1/150 to 1/75 grain doses before each feeding as a substitute for atropine and claims definite advantages in using the drug. Eumydrin (atropine methylnitrate) has been used, notably by the British, not alone in this connection but also as a medicament in the non-surgical cure of true congenital pyloric stenosis.

X-ray examination is widely used as an aid in differential diagnosis, however, many writers state that they no longer depend upon it. Dijkhuizen (3) says that as a rule this method can be dispensed with. Knox (1) states. "X-ray examination has been neither desirable nor helpful, although at the present time Dr. Vastine of St. Christopher's Hospital is working out a technic of air injection which may be helpful in some doubtful cases." Personally, it has been of value to me in my comparatively small group of patients who have presented true congenital pyloric stenosis. In my opinion, X-ray is an aid to differential diagnosis in direct proportion to the technician's experience with the particular condition.

Pylorospasm usually responds to atropine sulphate if given in doses of 1/1000 grain every four hours or shortly before each feeding. When this drug is used either as a diagnostic aid or a therapeutic remedy, it should be withdrawn gradually since some babies present definite nervousness if the drug is withdrawn suddenly. Homatropine hydrobromide is reputed to be just as effective in its antispasmodic action as atropine and has the advantages of not causing the marked dryness of the mucous membrane and can be withdrawn suddenly without producing the nervous manifestations.

Eumydrin (atropine methylnitrate) has been used extensively in England in the exclusive medical management of true congenital pyloric stenosis. Svensgaard (4) (1935) reported a large number of cases treated medically. One series of 61 patients, of whom two died, was treated with eumydrin, and her figures show the super-

iority of this drug over atropine. All her patients were kept in hospital during treatment, and the average stay in hospital was 77 days. Mackay (1936) reported 2 cases, and Dobb (1937) 3 cases successfully treated with eumydrine. Braithwaite (1938) published 21 cases, of which 3 were fatal and 3 did not respond to treatment.

The vomitus in gastro-enteritis may, and frequently does, contain bile, and the malady is often associated with fever and diarrhea. The presence of bile in the vomitus may mean duodenal adhesions, pylorospasm or gastro-enteritis. The absence of bile is very significant. This so-called "free interval" from vomiting, which the infant experiences from birth until about the 7th to 10th day is also significant. An accurate history, when obtainable, of the infant's behavior during its first 10 days of existence is very helpful.

In my opinion, surgery is the treatment of choice, however, there is little accord between those who favor surgical measures and those who favor medical treatment. All agree with the clinical description of congenital pyloric stenosis, but here the unanimity ends. Various surgical measures have been employed; notably, gastro-enterostomy, pyloroplasty of Fredet and finally pylorotomy of Rammstedt in 1912. My allotted time does not permit of descriptions of these operations. However, I feel impelled to mention two features which simplify the Rammstedt operation. First: If the upper limit of the incision is started well above the costal border, there is less danger of evisceration due to the child straining. Second: If the operation is done under local anesthesia, feedings can be started immediately. In contrast to my choice of local anesthesia, Knox (1) says that the anesthetic to be used is not, as has been stated, a matter of personal preference, but that open drop method of ether is the anesthetic of choice.

Maintaining body warmth following the operation is a most necessary feature in post-operative management. Some authors wrap the baby in cotton and wool bandages. Some keep the baby in an incubator for 3 to 5 days following the operation. We encounter the greatest diversity of opinion among outstanding clinicians regarding postoperative feeding, the variation being from immediate feeding to no feeding for 24 hours. Formulae used in feedings enjoy almost as wide a variety. If atropine has been used before the operation, it should be continued for a few days and withdrawn gradually.



Faber and Davis (5) after an exhaustive study conclude that, "It is clear that after pylorotomy for infantile pyloric stenosis gastric peristalsis is completely inhibited for several hours and is much depressed for 24 hours or more." It is obvious, however, from the description of their experiments that their patients were given inhalant anesthetics.

When we consider that in medically managed series there are fatalities as well as failures, which are eventually brought to surgery; also, that favorable cases require an average hospitalization of 77 days; and further, that with our present day knowledge of pre-operative, operative and post-operative care, a fatality being a rarity, it seems rational that resorting to the Rammstedt operation is not a radical departure. The arguments of those champions of medical treatment alone are too weak to persuade one to give up a treatment, which gives complete recovery in practically all cases. I think we can afford to, and should temporize with doubtful cases, giving them antispasmodics, thick cereal feedings, subcutaneous fluids and sedatives, if required. But this line of treatment should not be too prolonged. If an infant continues to lose weight and the symptoms of congenital pyloric stenosis persist after a week or 10 days of such conservative treatment, we should resort to surgery.

Even if the intervention does not reveal a stenosis, the surgeon need not reproach himself, because postponing the operation too long involves a greater risk for the child than does the operation.

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#### DISCUSSION

**Chas. M. Edelen:** I cannot quite agree with the essayist that there is a great deal of controversy between the advocates of medical or surgical treatment. Pediatricians are definitely inclined to early surgical intervention. They usually allow a short period of ten days to two weeks for medical therapy to be tried.

A few years ago Dr. Griswold described to us the incision used by Dr. Elliott Cutler in these cases. The opening is made through the right rectus muscle, beginning just at the costal margin and directly over the liver. With this type of incision it is very easy to deliver the pylorus,

there is very little tendency for the intestines to be extruded, and closure is facilitated by the presence of the liver directly beneath the incision, as I stated above.

In the last issue of the *Annals of Surgery*, Dr. David Robertson of Toronto describes a transverse incision just beneath the right costal margin and running laterally from the edge of the right rectus muscle.

The choice of anesthetic does not make much difference. It is just about as easy with a local as it is with ether. The point I would like to stress is that after an anesthetic has been started on these infants, and before opening the abdomen, the stomach be aspirated, as it permits one to deliver the pylorus with a great deal more ease.

Dr. Smith commented upon the number of deaths from series treated medically. In the discussion following the above mentioned paper of Doctor Robertson's, Doctor Donovan of New York reported a series of approximately 410 cases he had operated upon personally, with one death. That one death occurred in the first 100 reported.

There is quite a variation in the method and manner of closure of the incision, some advocating that it be done in layers while others use a through and through non absorbal suture.

**James W. Bruce:** I might reiterate that these cases are never emergencies. Time must be taken to get the patient properly hydrated. He also should get the benefit of several transfusions, one before and one after operation. He will make quick recovery. The use of atropine is something I started out with very enthusiastically several years ago. I learned of it from Dr. Sauer of Evanston who claimed that if it is given first, one never had to operate. I don't know how he feels about it today. I was disappointed. Regarding the use of Syntropan, I have used it for colic with good results. I should think it would be very nice to use. The difficulty about the medical treatment is that you leave the child with his life hanging by a thin thread for 77 days. That is a long time for a child to be in bad shape. Anything could happen—he could pick up a cold, get tonsillitis or pneumonia or diarrhoea. Therefore, that is a very good argument for operation.

We all feel that in postoperative feeding breast milk is the best. The question is, when to start. After seeing these cases, I feel it would be better not to put anything in the stomach for at least twelve hours. Then let them have 5 cc. of breast milk every three hours. Increase rapidly after twenty-four hours, keeping up fluids in the meantime.

**J. G. Sherrill:** I think I was one of the first men in town to do the Rammstedt operation, taking the work from Downes. We had to use anesthetics in the early cases. Dehydration was the worst trouble. Patients gain very little. If the

patient had been under the care of a good pediatrician, a good internist or a good doctor—but that doesn't always happen! If we find a patient sufficiently hydrated, I don't believe there is any method that will equal the open surgical method. In the early days we were inclined to do too much. The patient does not have any pain after the abdomen is open. In later years, we became devoted to anesthetics of the local type. The incision depends on the one the man likes the best. Any incision that reaches the pylorus is satisfactory. I like best the one one-half inch to the left of the midline. It will also cover over the peritoneal suturing. I never have seen hernia. I first did too much, with an incision down through the mucosa. If you can possibly avoid it, don't cut the mucosa.

This tissue has characteristics very much like granuloma. It is a peculiar granular, gray tissue. I have not made up my mind about histologic structure.

The mucosa is strong enough to take care of the meals of the baby. Therefore, I stretch the tissue without putting anything on top of it. I have known one ulcer three inches in diameter in an adult patient which was carried two years. At post mortem two years later, he had an external ring, as large as that, so that he must have carried meals with nothing to hold them but mucous membrane.

Don't overfeed, but feed plenty. Don't overtax the vessels with too much water or blood. The careful pediatrician will be of greatest help. Don't let these cases go too long.

**R. A. Bate:** Is there any resemblance between this granular tissue and scar tissue?

**J. G. Sherrill:** No. I have never studied it under the microscope but it looks almost exactly like regional ileitis.

**R. Alexander Bate:** The essay and the discussion have been very enjoyable; and anything coming from the Essayist may be considered as standard.

To those gentlemen, however, who have a tendency to find fault with the practitioner, I would tell the story of Sambo, who found himself in the chapel of the jail on Sunday morning—He said "I knows I lies and I knows I steal, but I haint lost my ligion." We still have hopes in the science of the profession.

All have observed that the application of water and aqueous treatments (not colloids) to burns are followed by the formation of more scar tissue than when a treatment consisting of no water, but oils or fats, as bases in lotions or ointments, constitute the treatment.

Presumably the explanation is, that cholesterol esters of the burnt tissues are washed away, or the cholesterol is precipitated from the tissues

by the water, a non solvent of cholesterol.

So frequently, in modern times, the baby is put to bed as soon as washed, with a bottle of water stuck to the lips.

The colostrum of the mother's breasts, which nature designed to complete the tissue metamorphosis of the mucous membranes and arranged for use for three days (as a rule) before the milk comes, has been completely ignored by this act.

Colic and possibly stenosis may indicate the altered pathology.

In the mucous membrane of the foetus metabolism has been conducted by the oxygen from the mother's circulation and the thymus gland. In the newborn baby the thyroid substance is not found for three days.

Presumably, cessation of the thymus type of metabolic change to lung-oxygen requires a short period.

If there be such a thing as congenital pyloric stenosis the explanation may be looked for in the thymus, which chiefly affects protoplasmic changes in which cholesterol is concerned.

I have nothing but theory to substantiate the hypothesis that infantile pyloric stenosis is the result of putting water in the stomach before creation so designed.

A diminished amount of cholesterol in the scar tissues such as described by Dr. Sherrill, may be proven by the physiopathologist, but so far as I know has never been attempted in this connection.

Cholesterol is found in practically all cells of the body.

Lecithin contains cholesterol and its esters; oleic acid and fluid fats hold it in solution.

Cholesterol forms a weak molecular union with saponaceous substance which neutralize toxic action and protects the body, says Mathews. It has the property of protecting these corpuscles from dissolving substances such as water, etc.

Cholesterol gives the cells their power of holding larger quantities of water without losing their peculiar semifluid (or colloid) characters, and without dissolving.

As a constituent in waxes of the skin, it protects the epidermal structures, says Mathews. So why not with the mucous membranes?

**Wallace Frank:** This is a most interesting paper and one that should appeal to all of us, surgeon, internist and pediatrician.

In my opinion it is most difficult to make a difference between a pyloric spasm in an infant and a hypertrophic pyloric stenosis. The symptoms of the two conditions are identical. If, however, palpation of the abdomen reveals the presence of a mass one can be certain that the



latter condition is present. As a rule the mass lies rather high in the abdomen and a little to the right of the midline.

In the old days, which Dr. Sherrill mentioned, before the time of glucose infusions and blood transfusions the operation for the relief for hypertrophic pyloric stenosis was fraught with a great deal of danger and the mortality was exceedingly high. Usually these infants were markedly dehydrated and under-nourished and it was the general condition of the patient that led to the high death rate following operation. Now with almost routine blood transfusions and the free administration of glucose subcutaneously the little patient can be brought into shape for operation. The almost universal employment of the Rammstedt operation in the treatment of this disease has played a large part in reduction of the operative mortality. I make an incision through the mass which is present at the pylorus carrying the incision about one-fourth of an inch above and below the area of induration. This incision is carried down to the submucosa, care being taken that the mucosa itself is not incised. The hard indurated tissue is then separated by a hemostat. This strips the dense hyalinized muscle tissue away from the submucosa. Should the mucosa be incised it is absolutely essential that it be adequately closed and some omentum tacked over the incision made through the hypertrophied pylorus.

Many of these children who have been operated for hypertrophied pyloric stenosis have later in life been reoperated and the pylorus end of the stomach explored. From gross appearance it is impossible to tell that the individual had in infancy suffered from this disease. What happens to the hyalinized muscle tissue I do not know. Certainly a mere incision through it does not take it away and it may be that the increased blood supply following the operation is the factor which causes the disappearance of the tumor. There is in the literature one case of a negro boy who had had the disease, was not operated and died at the age of sixteen. Examination of the pyloric end of his stomach showed that the mass was still present and had the appearance of hyalinized tissue.

**Robert Cohen:** Dr. Bruce's remarks about Dr. Louis Sauer remind me of the time I was in Chicago at St. Vincent Orphanage when Dr. Sauer was continuing this work on whooping cough vaccine. He used to relate his experiences in Berlin in pediatrics. He went to the Berlin Children's Hospital as a young man and used to make rounds with Prof. Dr. Finkelstein. Dr. Finkelstein knew that Dr. Sauer had done a good deal of work on cereal thickening in relation to pyloric stenosis and he would save the hard cases for him. A few of these had to come to a surgical

conclusion before they were relieved completely. I had the opportunity to meet Dr. Finkelstein at the Cradle in Evanston, through Dr. Sauer's introduction and I related this story to him and he smiled very heartedly.

Many cereal thickening feedings are in vain. I had two cases of pyloric stenosis, both had failures in operation, and both had gastroenterostomies. We speak of successful operations but I should like to ask Dr. Smith to give me a relative percentage of surgical failures.

**P. Guntermann:** When is it a pyloric stenosis, is always one of the big questions, also whether it is to be relieved by medical or surgical means. I have seen many cases and have had a little experience with so called pyloric stenosis, some of which had been advised operation but under atropine some of them got by without and some had to be operated on. We are told that true stenosis is easy to diagnose, that sounds good as you can feel the stomach and nearly see it, nothing will go through it but we know it is more than that.

Had seen two-cases operated on, these were as described by Dr. Smith. The first operative case I had was in 1928 or there about. The stenosis was like cartilage, cut through to the mucosa but as there was nothing but a pin hole through the stenosed pylorus, I did a gastroduodenostomy, in two weeks he was taken home. The second case was about eight years ago, Dr. Barbour saw the case and advised an immediate operation. We got it ready for the operation, gave it about a pint of 5 per cent glucose in saline subcutaneous. You can't say where you will make the incision, that depends where the mass in the stomach is. We made this incision an inch to the right of the mid-line. The stenosis was a band about three fourths of an inch long like tough cartilage. I incised through to the mucosa as there was no opening in the pylorus, I did a gastro-duodenostomy. The patient made an uneventful recovery.

The greatest thing to do is to make a diagnosis whether it is medical or surgical. X-ray is not satisfactory, if you fill the stomach with barium you will have a mess on your hands.

**I. T. Fugate:** The speakers have mentioned the complications which might come up or the little value an x-ray study might be in that of Pyloric Stenosis in infancy.

I am one who still believes that careful and painstaking study by fluoroscopic and plate examination in these cases might be of value. Peristalsis can only be intelligently studied by the administration of barium. How are we to know we have a complete Stenosis or to what degree this Stenosis might be unless we study this case by the administration of barium? Some-

one has spoken of contra-indication of the use of barium in these cases. It is the easiest thing imaginable to remove the barium.

First: The baby usually vomits.

Second: If the baby does not vomit it is quite easy to either siphon or empty the stomach by suction.

Let us not forget that x-ray might well be of inestimable value in a diagnosis of these cases.

**Uly H. Smith**, (in closing): In reply to Dr. Cohen's question it might be well to recall that a little more than 20 years ago we were taught that if these children could be carried along for four months that they could be saved from surgery. The first case I operated upon was within one day of being 4 months old; the emaciation was so marked the child was a veritable skeleton.

Dr. Wallace Frank's remarks were very enlightening. I have often wondered if any evidence of the pathological process remained and for how long it remained in patients who had congenital pyloric stenosis and were cured by medical means.

Dr. Charles Edelen suggested to me the incision which I employ and which I described in my paper; he now gives Dr. Arnold Griswold credit for the suggestion who in turn gives Dr. Cutler credit. I do not know of any differences of opinions in America concerning medical and surgical treatment for pyloric stenosis; I got my impression from the London "Lancet" and that of course, refers chiefly to British opinions.

Dr. Sherrill spoke of not seeing these cases until they were emergencies requiring immediate surgical intervention. I can not subscribe to that in the present era. I feel that with the aid of transfusions and fluid replacement these cases definitely can be placed in a different category from emergencies. Dr. Wallace Frank substantiated this opinion during his discussion. I did not intend to mention surgical technique but feel impelled to say that cutting into the mucosa is a most serious complication. This can be guarded against by using the knife but once, when cutting through the serosa and into the hyalinized tumor, then resorting to the use of a small haemostat for blunt dissection.

Twenty-five years ago I saw Dr. Irvin Abell perform a gastro-enterostomy on one of these cases. This procedure is a tremendous undertaking compared with the Rammstedt operation. Dr. Abell's case survived which gives food for thought that it depends upon who does the operation when mortality figures are given. Certainly, some surgeons are very much better technicians than others.

Dr. Guntermann spoke of the vomiting which persists for a while after the operation. This is unquestionably true and the child should be kept

on antispasmodics for some time after operation. This vomiting should not cause too much concern if the child is gaining weight. The psychiatrists tell us children develop habit spasm, hysteria and other nervous manifestations very young. This vomiting following the operation may be a nervous reflex manifestation.

Dr. Fugate's remarks in defense of x-ray aid coincide with the conclusion I submitted, viz; x-ray is of value in direct proportion to the experience of the x-ray technician with cases of this type.

## HOARSENESS, AN IMPORTANT SYMPTOM

SHELTON WATKINS, M. D.

Louisville

Hoarseness is a rough, low-pitched sound caused by faulty approximation, tension, or vibration of the vocal cords. The voice is made primarily by the play of expired air against the cords in the adductor and tensor positions plus vibration of the cords. Failure of the vocal cords to approximate causes weakness of the voice or aphonia, which is not a true hoarseness, but is commonly classified as a form of it. Resonance, articulation, hearing and other factors enter into the production of the voice but they are not connected with hoarseness.

The causes of hoarseness are too numerous to even mention in a paper of this kind. Professor Chevalier Jackson has listed about sixty conditions. In most of them hoarseness is not a prominent symptom, but is in a number and, in some a very important one. Due to the great variety of affections in which it is a symptom and the different kinds of pathology causing it, a systematic classification is not possible. The following plan, I believe, is a practical one for the purposes of this paper. There will, of course, be some over lapping in these groups, which is unavoidable.

I will not attempt to describe in detail any of the conditions in which hoarseness occurs, which would consume too much time, but merely to mention the more important points of them in relation to it.

I. Hoarseness in Conditions Peculiar to Infants and Very Young Children:—

Laryngismus Stridulus is a form of adductor spasm followed by a noisy inspiration which occurs in young and weak children. The attacks usually start at night and while the patient is sleeping. Dyspnea



is really a more prominent symptom than hoarseness. This condition, Meakins says, is a part of the syndrome called tetany which is itself a symptom of a more profound disturbance, such as alkalosis, parathyroid deficiency and rickets. Laryngismus stridulus is frequently associated with rickets. In some cases adenoids are said to be a factor.

Congenital Laryngeal Stridor is a similar condition characterized by noisy inspiration and silent expiration which develops soon after birth. It is probably due to failure of the proper development of the cortical centers controlling the coordination of the laryngeal muscles.

Foreign Bodies, when caught in the larynx, will cause hoarseness, but coughing is a much more prominent symptom.

## II. Hoarseness in Acute Infections:—

One of the most frequent causes of hoarseness is Acute Laryngitis, in which there are the usual signs of inflammation of the entire mucous membrane of the larynx, including the vocal cords. There are both specific and non-specific forms.

In Acute Oedematous Septic Laryngitis, the infection is much more marked than in the previous one and, as the name implies, there is oedematous swelling of the tissues. It is not, however, a true oedema, which is a very rare condition in the larynx. Instead it is more a succulent infiltration, according to Thomson. The swelling is chiefly in the posterior portion of the larynx where the mucous membrane is loosely attached to the underlying structures, but the vocal cords are also inflamed and hoarseness is a prominent symptom at first. Later it may be overshadowed by dyspnea. It is usually caused by some type of the streptococcus, frequently the beta-hemolytic. This form of laryngitis not infrequently is found in measles, scarlet fever, diphtheria, influenza, variola, typhoid fever, erysipelas and whooping cough. In diphtheria the laryngeal mucous membrane may at times look like nasal polyps.

Prominent causes of non-inflammatory oedema in the larynx, any of which may cause hoarseness are potassium iodide, nephritis, allergy, Quincke's oedema, myxoedema, cardiac anasarca, mumps, compression of tributaries of the superior vena cava and following radium treatment of the larynx.

In Acute Membranous Laryngitis there is ulceration with the formation of a membrane. Hoarseness is a prominent and early symptom as a rule but may, of course,

be quickly overshadowed by more serious symptoms, such as dyspnea. It is found chiefly in diphtheria, known also as true croup. This serious disease, while much less prevalent than years ago, is still encountered and must be considered in all cases of increasing hoarseness in the very young. In measles there is a pseudo-membrane in the larynx in the desquamation stage.

Other causes of hoarseness in this group are Acute Laryngitis in children and Acute Laryngo-Tracheo-Bronchitis also in children. The former is sometimes called false croup. During the day the child has only hoarseness, but at night there is a tendency to develop dyspnea. This is due to involvement of the subglottic region where there is elastic connective tissue in the mucous membrane and is therefore capable of marked swelling. In Acute Laryngo-Tracheo-Bronchitis which is largely limited to very young children we have the same type of swelling and, also, the accumulation of thick tenacious discharge in the trachea and bronchi. Hoarseness is not as prominent a symptom as dyspnea, especially in the fulminating type.

## III. Hoarseness in Chronic Infections:—

In Chronic Laryngitis most of the mucous membrane is thickened, but especially the vocal cords, and hoarseness is a prominent symptom. There are a large variety of causes, but continued neglect of the voice is one of the most frequent. Chronic laryngitis occurs in street hawkers, workers in dusty and irritating atmospheres, is often secondary to a chronic nasal sinusitis, adenoids or tonsillitis, especially the first, and is found in syphilitics, alcoholics, and among excessive smokers. Hoarseness occurring in children without fever is often due to chronic laryngitis. There are several forms of chronic laryngitis in which hoarseness is the chief symptom. Prominent among them are syphilis and tuberculosis.

In hereditary syphilis there is a general hyperplasia of the mucous membrane of the larynx. In the acquired form, the laryngeal lesions are most often tertiary and usually are either a gumma or infiltration. The hoarseness may be the result of a paralysis caused by fixation of a vocal cord by the disease or due to involvement of the laryngeal nerve somewhere along its path.

Whenever a youth has several attacks of hoarseness, or persistent hoarseness, tuberculosis should be considered as a cause. It is probably the most serious lesion

causing hoarseness during this period of life. It involves chiefly the posterior portion of the larynx but can attack any part and not infrequently the primary lesion is on a vocal cord. The hoarseness may be either due to mechanical interference with proper approximation of the vocal cords, or to fixation of a vocal cord by extension of the disease. It must be remembered though, that in about a third of the cases of laryngeal tuberculosis, hoarseness is not an early symptom; also that tuberculosis is rarely, if ever, primary in the larynx. Disappearance of the voice, Jackson says, is not an infrequent initial symptom in the development of laryngeal tuberculosis.

#### IV. Hoarseness in Certain Diseases in which the Joints of the Larynx are Involved:—

The deposits of sodium monourate in Gout may occur in the crico-arytenoid and crico-thyroid joints, especially the former, and cause ankylosis. More or less hoarseness is present, depending upon the impairment of the movement of the joint involved. Also, thick concretions may occur on the vocal cords and at times simulate cancer.

Again in Acute Rheumatic Fever and Arthritis involvement of the crico-arytenoid and less often the crico-thyroid joints may cause hoarseness for the reasons just stated under gout. Arthritis and fixation of these joints may occur, also in diphtheria.

#### V. Hoarseness Following the Use of Certain Drugs and Poisons:—

Potassium Iodide at times produces quite a marked oedema of the larynx which is something that should be kept in mind whenever treating syphilis in this locality. Hoarseness may be a symptom as well as dyspnea. In some cases, an emergency tracheotomy has been necessary.

Silver nitrate is not as often a cause of hoarseness as it was a good many years ago when its use in treating laryngeal lesions was much more common. It can, if frequently used, produce a chronic thickening of the mucous membrane which may lead to permanent hoarseness.

Chronic Alcoholism will produce hoarseness due to peripheral neuritis of the recurrent laryngeal nerve. Also, it may cause a chronic laryngitis.

#### VI. Hoarseness in Certain Neurological Diseases:—

All of the muscles of the larynx are supplied by the recurrent laryngeal nerve except the crico-thyroid and part of the

interarytenoideus, which are supplied by the superior laryngeal nerve. Practically always, therefore, paralysis of the vocal cord involves the recurrent nerve. Also, it involves more often the left one than the right because of the much longer journey of the former through the thorax. In the great majority of cases, the paralysis is unilateral, although it is at times bilateral.

There are several forms of motor paralysis of the larynx, chief of which are the bilateral abductor and unilateral abductor. In both bilateral and unilateral abductor paralysis the voice is good because both cords can approximate and so long as it remains an abductor paralysis there will be no hoarseness. But, should it become complete, the tensor and adductor muscles also lose their power and the vocal cord takes the so-called cadaveric position, midway between abduction and adduction. Then the voice will be husky and there will be some air waste. In the unilateral cadaveric position there is more huskiness and less air waste than in the same bilateral position. Adductor paralysis is rare. When bilateral there is no voice or only a low whisper. When unilateral the voice is husky and wheezing. Paralysis of the interarytenoideus muscles, which is always bilateral, because of the innervation from both nerves, is rare except as part of the complete paralysis in which the cords assume the cadaveric position. Tensor paralysis is likewise rare except as part of a total cadaveric paralysis. The voice is husky and tires easily. Abductor paralysis of the newborn has been discussed under Congenital Laryngeal Stridor.

A number of neurological diseases may cause hoarseness due to paralysis of the recurrent laryngeal nerve in its central portion, chiefly in the medulla oblongata. Most important among them are syringomyelia, disseminated sclerosis, bulbar paralysis, tabes dorsalis, paresis, myasthenia gravis, acute and chronic meningitis, brain tumors, and epidemic encephalitis. The paralysis may be also bilateral.

Other causes of bilateral paralysis are lead poisoning, influenza, diphtheria and pneumonia.

#### VII. Hoarseness Due to Cervical and Mediastinal Lesions Causing Pressure on the Recurrent Laryngeal Nerve:—

A variety of conditions can cause paralysis of the recurrent laryngeal nerve in the neck and mediastinum, most prominent among which are an enlarged thyroid, enlarged thymus, tuberculous lymphatic



glands, luetic lymphatic glands, Hodgkin's disease, aneurysm of the arch of the aorta, enlargement of the left auricle in mitral stenosis, lymphosarcoma of the mediastinum, tumors of the esophagus, tumors of the trachea, bronchi and lungs, pleural adhesions and injuries caused by forceps during delivery.

Some of these conditions can, also, produce hoarseness by means of a passive congestion of the mucous membrane of the larynx due to pressure on tributaries of the superior vena cava.

Most of these conditions can produce a bilateral paralysis, but then hoarseness is usually not a symptom.

#### VIII. Hoarseness Following Operations:

The two most frequent causes of hoarseness in the group are a too high tracheotomy with involvement and necrosis of the cricoid cartilage and following thyroidectomy in which the recurrent laryngeal nerve is cut during or caught in scar tissue after the operation. These unfortunate complications occur much less frequently than formerly. A patient with a tumor or hypertrophy of the thyroid may have a paralysis of the recurrent laryngeal nerve with very little evidence of hoarseness, especially if incomplete and the cord is in the midline position. It is, therefore, advisable that an examination of the larynx be made both shortly before and after the operation. If during the operation there is an unrecognized paralysis on one side and the opposite nerve is cut, dyspnea usually occurs at once and an emergency tracheotomy may be necessary. Such may be the cause of some sudden deaths during thyroidectomy.

#### IX. Hoarseness Peculiar to Women:—

Hysterical Aphonia is a form of adductor paralysis, or weakness, which occurs much more often in women than men but, also, not infrequently in "shell-shocked" soldiers. The vocal cords fail to approximate on attempts to talk. It is more a weakness or loss of voice than a hoarseness. It is probably a functional rather than a true paralysis because the vocal cords adduct well on coughing and laughing. The condition clears up in most cases through psychic treatment. It is nearly always caused by emotional upsets and great mental strain.

Post-cricoid Carcinoma is a lesion which occurs more often in women than men and is really an extra laryngeal condition. It, however, may cause hoarseness through paralysis of the recurrent laryngeal nerve. Also, it may produce hoarseness through

involvement of the larynx by direct extension or by oedema of the larynx, interfering with movements of the cords.

#### X. Hoarseness in Special Laryngeal Lesions and Newgrowths:—

Singer's Nodes are bilateral oedematous fibromas usually on the margin of the vocal cords at the junction of the anterior and middle thirds which, of course, interfere with proper cord approximation and cause hoarseness. Faulty use of the voice in talking and singing are the usual causes. Cheer leaders, teachers, and singers not infrequently develop singer's nodes.

Papillomata are the most frequent form of benign newgrowths in the larynx and occur in about eighty per cent of all cases under ten years of age. They are warty growths occurring chiefly on the vocal cords and ventricular bands. Hoarseness, of course, is an early symptom and remains until the condition is cured. It is one of the most frequent causes of hoarseness in children not associated with fever. Papilloma may be congenital and should be looked for as a cause of hoarseness in the newborn.

Fibroma is second to papillomata among the benign newgrowths in the larynx. When it occurs on the vocal cords and interferes with proper adduction, hoarseness of coarse, is present.

Hemorrhage in the laryngeal mucosa may be due to a number of causes. Chief among them are whooping cough, typhoid fever, anaemia, leukemia, pertussis, hypertension and great physical exertion (in which the vocal cords are kept in the adduction position), over use of the voice in singers and sometimes during the menses. Of course, hoarseness is always present if the haemorrhage is large or on the vocal cord.

Contact Ulcers and Pachydermia are frequently confused, and hoarseness is a prominent symptom in each. In the former the lesion is chiefly at the vocal process, whereas in the latter it is in the posterior portion of the larynx, including the interarytenoid space. The former is a granulo-matous mass with ulceration, whereas the latter is a hyperplasia of the epithelium. The former is not a pre-cancerous lesion and the latter is. This is especially true of pachydermia on the anterior portion of a vocal cord, where it may occur sometimes.

In Malignancy of the Larynx the lesion is nearly always a carcinoma, and by far the most frequent type is epithelioma. Sarcoma occurs, but is very rare. The favorite location of carcinoma is a vocal

cord and the anterior third to half. It occurs most frequently around sixty, but has been known to occur in the second or third decades of life. It is much more common in men than women. At first the lesion is small and usually grows slowly along the course of one cord. Hoarseness is an early, persistent and increasing symptom. When it occurs in a man, in middle age or later, and does not clear up within two weeks time, a laryngeal examination is very definitely indicated. In fact, it is imperative and should not be delayed any more than is absolutely necessary. The poor lymphatic supply of the larynx, the resistance of the cartilagenous framework to the invasion of carcinoma and the fact that hoarseness is very frequently an early symptom, all make the occurrence of carcinoma in this region probably the most fortunate in the body, with the exception of the skin, if the term "fortunate" can be used in connection with carcinoma. In the great majority of cases, an early diagnosis can be made in time for the proper treatment and before metastases take place, provided the patient seeks medical advice promptly and, the family physician always keeps in his mind that carcinoma is one of the most frequent and by far the most serious cause of hoarseness in an elderly man, and that it should not be allowed to continue longer than two weeks without a careful examination of the larynx, including a biopsy when malignancy is suspected.

Hoarseness in this condition is at first due to mechanical obstruction to the proper approximation of the vocal cords. Later it may be due to fixation of a cord through extension of the disease. When this occurs, it usually means that the disease has become well advanced. We should not, therefore, wait for fixation of the cord to make our diagnosis of carcinoma of the larynx.

At times hoarseness is the only symptom of very serious maladies. Persistence of it for days or a marked increase in it within a few hours calls for a prompt examination of the larynx. Thus, much suffering will be prevented and sometimes a life will be saved.

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## LYMPHATIC LEUKEMIA

MARION F. BEARD, M. D.

Louisville

One of the lessons that even a short period in the practice of medicine teaches is the danger of ever considering any disease hopeless. The attitude of mind which refuses to seek constantly for a better understanding of fundamental processes will invariably result in lack of progress. Even in a short period of ten years of medical experience so much has been added to our knowledge that lecture notes and texts of that period are entirely inadequate in many areas. The edition of a prominent textbook of Medicine in use ten years ago describes Pernicious Anemia as "A grave, progressive disease interrupted by remissions." It states that "The ultimate outlook is grave," and that "The great majority of cases die within three years." While the subject under consideration here is not one that has been conquered from the therapeutic standpoint, so much has been added to our understanding of this syndrome that for the first time we can consider the subject with hope and with anticipation of ultimate control.

In the present discussion a brief attempt will be made to present (1) Some of the modern concepts of lymphopoiesis and lymphatic leukemia, (2) To classify the syndrome into several clinical groups which seem justifiable with the present available evidence, and (3) To point out certain analogies between some of the groups and Pernicious Anemia. Certain of these points are at present controversial and no attempt will be made here to go into detail on these points, but rather an attempt to present a working hypothesis for further accurate clinical study will be made.

#### LYMPHOPOIESIS AND LYMPHATIC PHYSIOLOGY

According to our present concept the lymphocyte arises from a primitive free cell undifferentiated and present in the lymph nodes, spleen and other tissues. This in turn gives rise to the lymphoblast which is found in the germinal centers of the lymph nodes and spleen chiefly, which, in turn, through an orderly process of maturation, ultimately becomes the circulating mature lymphocytes. Normally, in health, these lymphocytes occur in rather well defined and constant amounts in the peripheral blood. Wiseman has recognized three stages in the maturation of



the lymphocyte. With the supervital technique, the young large, young intermediate, and small. With the fixed and stained preparations the deeply basophilic, moderately basophilic, and faintly basophilic. The proportion of these young and mature lymphocytes, is likewise rather constant in the peripheral blood in health.

Many factors in disease are already known to influence the total circulating lymphocytes as well as the proportions of young and mature lymphocytes. Chronic infections such as tuberculosis, in the healing stage, nearly always result in a lymphocytosis. Most of the allergic conditions will result in a left shift of the lymphocytes of moderate degree. Infectious mononucleosis as a rule results in a tremendous stimulation to lymphopoiesis with a definite lymphocytosis accompanied by a marked left shift.

The exact role of the lymphocyte in the body economy is still unknown. They are apparently necessary for the maintenance of normal bodily functions and they seem to play some role in the metabolism of proteins, high protein diets for instance causing a definite stimulation of lymphopoiesis. Our lack of exact knowledge of physiological role of the lymphocytes undoubtedly is responsible for our lack of knowledge of the fundamental processes occurring in many diseases which affect the lymph tissue.

#### TYPES OF LYMPHATIC LEUKEMIA

In discussing the leukemias involving the lymphocytes, which are after all only a small group of diseases affecting this tissue, we shall attempt to classify them under two headings with three sub-groups under each. These two main groups are I. Malignancies, II. Maturation Disturbances. There are many reasons for this grouping besides the obvious one of clinical usefulness. More detailed discussion of these reasons will be included under each. This grouping also serves to reduce the over-emphasis on total white counts which has been a stumbling block in the past to a more general understanding of the fundamental nature of these disturbances. There are so many factors involved that the significance of the level of the total count in the peripheral blood should be considered of the same importance as the actual degrees of fever or as the actual millimeters of mercury of the blood pressure and not as the sole indication of disease activity.

##### I. Malignancies.

The malignancies, no matter what the

character of the peripheral blood picture is, have certain features in common. They are characterized by an unrestrained growth of cells which in many respects resemble lymphoblasts. They may arise in any tissue and are readily metastatic as well as rapidly locally invasive. In pathologic sections they are shown side by side with normal lymphatic tissue, invading this normal tissue in a similar manner to all malignancies. The individual cells of this group are all quite similar and are most readily identified by the supervital technique. They have a very vesicular nucleus with a large nucleolus and refractile bodies in the cytoplasm, sometimes staining with neutral red but readily differentiated from the neutral red bodies sometimes seen in the normal lymphocytes. The mitochondria are usually quite small and faint. These cells, if seen in the peripheral blood, are also found alongside quite normal lymphocytes and the total circulating lymphocytes may be little changed. Warburg studies on these cells show them to react consistently as malignant cells.

Finally the clinical picture of this group is quite characteristic of a malignancy, a rapidly progressing disease with little tendency to remission, and with a final outcome uniformly fatal in spite of all therapy within three to twelve months. For clinical purposes this group may be arbitrarily sub-divided into three types depending on the peripheral blood picture.

A. Lymphosarcoma: Here the peripheral blood picture is usually normal unless bone marrow metastasis becomes marked. There is usually a localized tumor which may occur anywhere and upon which the presenting symptoms will depend. The course is usually very rapidly progressive, with rapid enlargement of the tumor and early metastasis, particularly to the lymph glands. Diagnosis is usually dependent on biopsy of the tumor material or lymph glands. Therapy is of little avail and the outcome is fatal in from two to twelve months.

B. Leukolymphosarcoma of Sternberg:—Fundamentally here the process is identical with lymphosarcoma except that for some reason the sarcoma cells escape the barriers into the peripheral blood and there may actively multiply by mitosis. Because of this the metastasis is usually more widespread, the bone marrow is more completely involved, the local tumors are not so large, and the clinical course more rapid than the lymphosarcoma. These

cases as a rule are picked up on routine blood examination where the similarity of the sarcoma cells to lymphocytes leads to the diagnosis of Acute Lymphatic Leukemia. Their course is rapidly fatal and may even terminate in one or two weeks after the presenting symptoms although two to four months is the usual course.

C. Aleukemic Leukolymphosarcoma:—This clinical syndrome probably represents a middle ground between the two previous types. Here for some reason the sarcoma cells do not reach leukemic proportions in the peripheral blood but because of extensive bone marrow involvement an anemia and leukopenia result from the bone marrow suppression. Fundamentally the same type of cell is involved with the same clinical and pathologic process. The presenting symptoms may be those of a localized tumor or the leukopenia, anemia and predominance of lymphocyte cells may be picked up on routine blood examination. Their course is essentially the same though as a rule it is somewhat shorter than the lymphosarcoma.

## II. Maturation Disturbances.

This group comprising those cases usually spoken of as Chronic Lymphatic Leukemia present certain analogies to Pernicious Anemia that make for interesting speculation. While as yet there is no definite evidence to show them to be deficiency diseases, these analogies to a known deficiency state should be pointed out in spite of the conflicting differences. Considering them in this light results in a better understanding of the disease from a diagnostic standpoint and a better handling of the individual patient.

In the first place, whether the peripheral blood is leukemic or not, there are not, as is generally considered, too many lymphocytes. Actually normal lymphocytes are almost impossible to find in blood films, and there is probably an almost total absence of normal functioning lymphocytes. This is analogous to the bone marrow in pernicious anemia where we have a maturation arrest of megaloblasts. Many consider the megaloblast to be a qualitatively changed erythroblast and actually there is a great increase in these elements with a decrease in normal functioning erythroblasts and erythrocytes. Just so in chronic lymphatic leukemia we have a maturation arrest of qualitatively changed lymphocytes with a decrease in normal lymphocytes.

In untreated pernicious anemia we have a fairly prolonged chronic illness often

characterized by remissions. In chronic lymphatic leukemia we have a clinically similar picture. While the lymphocyte maturing factor exists only in the dreams of a few these analogies at least serve to make us hopeful of its discovery and a more widespread consideration of the disease in this light will serve to make its use more rational if and when its discovery occurs. For clinical purposes this group also is subdivided according to the peripheral blood picture.

A. Conheim's Type Chronic Lymphatic Leukemia: In this type of chronic lymphatic leukemia most of the phenomena seen in the other types are present. The peripheral blood, however, is frequently normal, both in quantitative and qualitative relationships. As a rule the qualitative changes in the lymphocytes are so slight as to be almost undetectable. The lymphadenopathy, however, is present and biopsy studies reveal a node with the same pathological changes seen in the other types. The normal node architecture is destroyed and the entire node is made up of a cellular structure of qualitatively changed lymphocytes without the normal maturation range. The bone marrow as a rule shows a limited replacement of lymphocytes. These cases may go on with little clinical change for years and may eventually die of some other cause. Occasionally they may change into one of the other types.

B. Chronic Lymphatic Leukemia: This type represents the largest group numerically not only of this syndrome but of all leukemias. This group includes the typical case usually spoken of as lymphatic leukemia with lymphadenopathy and moderate splenomegaly, moderate anemia and marked elevation of the total white count, consisting almost entirely of lymphocytes. At biopsy the nodes are indistinguishable from those of the Conheim's type. Bone marrow invasion is usually present with its resulting signs of marrow replacement. Terminally there may be marked invasion of many of the body tissues by these atypical lymphocytes. The course may be quite prolonged, cases even of twenty to twenty-five years have been reported with death finally from unrelated causes.

C. Aleukemic Chronic Lymphatic Leukemia: This type represents a group of cases in all respects similar to the above except that either massive bone marrow invasion without peripheral blood invasion occurs, or tissue infiltration occurs so readily that high peripheral blood figures are not reached. Because of these features



there is an earlier anemia, leukopenia is common and the fatal progress of the disease is much more rapid. Biopsy studies of the nodes again show identical findings and infiltration of other tissues is common.

#### THERAPY

A. Malignancies. The only available therapeutic measure which has any influence on the sarcoma cell is radiation. These cells are extremely radio-sensitive in the earlier course of the therapy and small doses of 50 r. u. repeated as necessary will frequently bring about a prompt remission with melting away of the tumor masses. Unfortunately those remissions are of short duration and succeeding ones are more difficult to bring about. This may serve to prolong life and especially comfort and should be used. Other measures such as transfusion, etc. may be used as the individual case warrants. Surgery is of no avail even early because of the nature of the process.

B. Maturation Disturbances. In this group therapy should be directed at the individual problems arising from the nature of the process. If the lymphadenopathy gives rise to symptoms radiation of the glands in groups with 100-300 r. u. to each group at one to three day intervals may reduce the size of the glands and relieve symptoms arising from this factor. These cases should be followed closely for several weeks after radiation for adverse effects on the hematopoietic system. If the bone marrow involvement is severe radiation of the bones may reduce the infiltration although great care must be exercised in choice of dosage for each case. If the anemia is severe repeated transfusions may help to carry the patient until radiation has been effective. General supportive measures such as high vitamins, adequate diet, rest, etc. are of course indicated in every case because of experimental evidence as to the effect of high protein intake on lymphopoiesis, a diet low in protein is indicated. Other remedies such as arsenic, iodine, etc. have been disappointing as has surgery in any form.

#### SUMMARY

1. The high points of the physiology of lymphopoiesis have been discussed.
2. A classification of Lymphatic Leukemia into workable clinical groups has been attempted.
3. Certain similarities between these and known malignancies and known deficiency states have been pointed out.
4. Important therapeutic measures have been emphasized.

#### DISCUSSION

**Harold Gordon:** I have enjoyed Dr. Beard's presentation even though I don't find myself in agreement or in sympathy with his main thesis. As I understand Dr. Beard's essay, he suggests that lymphatic leukemia may be divided into two main groups—neoplastic and non-neoplastic. That would be very nice because clinically you might then hold out more hope for some of the patients. This viewpoint at present, however, seems to be based upon evidence which is presumptive rather than absolute. The interpretation of microscopic qualitative differences in cells is often a matter of experience, with the personal equation looming very large. Another objection I have is that Dr. Beard uses the terms "infiltration," "invasion" and "loss of normal lymphatic architecture" in speaking of the so-called non-neoplastic lymphatic leukemias. Those are the very criteria which pathologists for years have demanded as a *sine qua non* for the diagnosis of tumors of the lymphoblastoma group.

Reverting for a moment to qualitative differences in the staining of cells. This is a difficult matter. I could use an analogy. Carcinoma of the cervix is quite malignant, leiomyosarcoma of the uterus relatively benign. The carcinoma, however, dresses much like the West-end dandy, complete with striped trousers, long coat and top hat. That is, the cells are usually well differentiated squamous cells, often with epithelial pearls. The leiomyosarcoma, on the other hand, may masquerade in the loud clothes of the costermonger—it usually has giant cells and cells which stain very irregularly. Histologically this looks like a very malignant tumor; clinically it is comparatively benign.

The question of cell behavior in the Warburg respirator is easily settled. This is only one biologic activity of the cells. Certainly it is not the final factor or even necessarily an important factor in the diagnosis of malignancy or lack of malignancy.

I also want to point out most emphatically that malignant disease is not inevitably fatal. If we did not believe that, we would not be justified in urging patients to submit themselves for prophylactic examination. If we do not believe that cancer of the breast or the uterus is curable, what right have we to urge patients to submit to early treatment? The same thing should eventually be true of leukemia. That some patients with leukemia are able to survive for twenty years proves nothing. That the average duration of life in subacute or chronic leukemia is from two to six years, helps an individual patient less. We cannot apply average duration of disease to individual patients, except in a very general

way. Furthermore, the response to x-ray further suggests that the leukemias are neoplastic. This is borne out also by recent experimental work. For instance, Furth has transmitted leukemia to mice by the injection of a single leukemic cell. That does not sound like a metabolic disturbance. In conclusion, I'd like to point out that protein starvation is not feasible as a therapeutic procedure. The leukemic cells are parasitic cells capable of obtaining their proteins from the host who will suffer from edema due to protein deficiency.

**W. H. Allen:** There is some question it seems as to whether acute lymphatic leukemia and chronic lymphatic leukemia are one and the same disease.

Acute lymphatic leukemia occurs usually in children, certainly in those in the younger stage of life, that is, under thirty years of age. The chronic form is found as a rule in older people. The acute type is much more drastic and runs a more malignant course. However the same type of cells are found in each case. The small lymphocyte predominates in the chronic case and the large lymphocyte predominates in the acute case, though each type of cell may be found in both cases.

Again there is some question as to whether the leukemias are malignant or resulting from some type of infection, a virus or the result of some metabolic disturbance. If malignant or neoplastic, it seems plausible to feel that it is a local condition, involving some one gland or group of glands, in its beginning. If such is the case, then is the time we who pose as hematologists should be able to interpret the blood picture. As a rule when we see the blood picture, the blood stream is saturated with lymphocytes and the disease is generalized and systemic, and but little can be offered. If an infection, a virus or some metabolic disturbance is at the root of the trouble, then most likely the condition is systemic from the beginning, and the lymphatic system as a whole rather universally invaded.

It is a problem sometimes to determine whether we are dealing with acute lymphatic leukemia or some one of the other forms. However, a detailed differentiation makes but little difference as the symptoms are the same, the treatment the same and the termination the same.

The cases all prove fatal in the end although Dr. Beard states that several cases of chronic lymphatic leukemia on record, are still alive after having the disease over a period of years.

Dr. Beard has given us a study of the origin and function of the lymphocyte and the leukemias, associated with it which has proven quite interesting.

**R. Alexander Bate:** Doctor Beard in the beginning of his excellent discussion used pernicious

anaemia as an illustration of what might be accomplished in previously hopeless diseases. He might have gone farther and said the elaboration of both the cause and cure were endocrinologic considerations and the same applies to leukemic discussions.

Alfred Scott Warthin, the pathologist, incriminates the branchial region in this class of morbid anatomical changes.

The branchial clefts furnish the anlagen from whence arise the thyroid, the para-thyroid and the thymus endocrine tissues, which are epithelial bodies.

Thyroid, parathyroid and thymus cells, or primary granules from their respective anlagen, as they descend to their individual sites of physiologic activity, frequently become implanted in the tissues of one or both of the other two differently functioning glands.

These accessory granules of the ductless glands are prone to pathologic activity, especially after the climax of endocrine function.

Carcinomatosis, Hodgkin's disease, agranulocytosis and other forms of leukemic manifestations are closely associated with such origin.

Like the suprarenal glands, the thymus possess a cortex and a medulla, each of different structure and different physiologic activity.

The influence of the thymus upon mitosis and metastasis; thymic physiologic and structural changes coincident with those of the parathyroid; Hassal's corpuscles becoming sclerosed, calcified and the reticulum deeply inbedded in fat, serve as premises to many pathologic conclusions bearing upon leukemia.

The spleen is more probably secondary than primary in the consideration of leukemia.

Splenectomy is not followed by death.

Thymectomy in seventy-five per cent of the cases is fatal; and it is believed accessory thymic cells maintain life in the twenty-five per cent of survivals.

The thymus appears closely connected with the origination of leucocytes; certainly it is most active in the reticulo-endothelial system.

Nucleotides and animal nucleic acid, which contains thymine are of service in agranulocytosis, and therefore should indicate the use of the thymus in the treatment of other leukemias.

That carcinomatosis and its leukemic-like changes are associated with thymic pathology hold deep interest.

Dr. Beard is to be encouraged in his leukemia investigations.

Let us hope they may extend to the thymic relationship.

**Gordon S. Buttorff:** I think Dr. Beard has presented an excellent paper in a most interesting manner for which he deserves a great



deal of credit. Dr. Gordon's discussion illustrates how confusing present day trends and newer work on blood can become. I believe I am not alone in this view point.

It might be interesting for you to know that at the meeting of the Southern Medical Association here last week, I went to the booth of each medical publishing firm in an endeavor to locate something recent and up-to-date on the blood. The only thing I could find was a monograph of three volumes on medicine containing a chapter by Dr. Doane, of Columbus, Ohio, with whom Dr. Beard has become associated. Incidentally this monograph sells for \$45.

Whether or not we are in accord with Dr. Beard's views, they certainly open up new avenues of thought, and hold forth some hope for the future of these cases, even though definite therapeutic procedure may not follow the exact steps he has suggested. For that matter the early work on pernicious anemia did not lead to the immediate finding of the remedial concentrate fraction of the liver that we now use. In a similar sense, this may be true of lymphatic leukemia. Through stimulation of thought by such a paper as this, we may eventually find something which may ameliorate or even cure some of the cases of leukemia.

**A. T. McCormack:** I would hesitate to inject myself into a hematologic discussion. I just want to call to your attention that when Dr. Beard leaves for Columbus he will be the first member of his family to leave Kentucky. I had the privilege of knowing his father and uncle and being associated with his grandfather who, with Dr. Baker, was one of the most eminent members of the profession. I can remember hearing these old graybeards join in a debate about the causation of disease by various bacteria which were recently being discussed, his grandfather taking the advanced stand of not being in accord with the tenets of our science and art as practiced at that particular time. It is gratifying that this grandson, like his grandfather, is branching out in new ventures in knowledge.

Recognition of Dr. Beard by the sister state of Ohio speaks highly of his experience and services as a member of the profession. However, I hope that he will find it so inhospitable that he will return to Kentucky, the state where his father and grandfather contributed so much, and continue his work here.

**Marion F. Beard** (in closing): I think that time will be the only thing that will separate or bring together these varying viewpoints.

I would like to emphasize one point made by Dr. Gordon. In the use of a low protein diet it is important not to use such a low diet that therapy will produce more damage than the disease itself.

## A HISTORICAL SKETCH OF THE LOUISVILLE EYE AND EAR SOCIETY

CHAS. K. BECK, M. D.

Louisville

All the records, minutes, constitutions, by-laws and secretary's book were lost in 1925. There is no existing record known to the membership of any transactions of the Society prior to 1926. The Society is therefore greatly indebted to Geo. A. Robertson for the sketch quoted below verbatim.

"The first Eye and Ear Society was organized here in 1899 through the efforts of Dr. Ray and Dr. Pfingst, the members being Drs. Coomes, Reynolds, Cheatham, Ray, Dabney, Evans, Pusey, Taylor, Bailey, Converse, Pfingst and Morris. The meetings were held in the various members' offices. Light refreshments were generally served by the host. This society died of inanition after three or four years.

The second society was begun somewhere about 1904. At that time J. N. McCormack and Arthur McCormack urged upon the various medical societies to affiliate with the Jefferson County Society, so that many of the groups of doctors like the Surgical Society, Falls City Society, the Old Louisville Academy of Medicine, and the Practitioners' Club, disbanded and united with the Jefferson County Society, as special sections. There were more specialists in Louisville then so the following names were added to the Eye and Ear Society: Drs. Robertson, Shafer, Lederman, Boyd and White. The meetings of this second Society were held in the old Jefferson County Society Rooms on the seventh floor of the Francis Building. This arrangement was of short duration however, as it lacked the social and personal contact of the smaller societies.

The third Society, which is the present Eye and Ear Society, was organized in 1913 and held its meetings in the Commercial Club Rooms in the Inter-Southern Building. The privilege was granted through the kindness of Henry Tuley, who was at that time president of the Commercial Club. After using these rooms for about a year, the Society found that they could avail themselves of the Board Room at the City Hospital and voted to hold its meetings there because it would give them an opportunity to bring clinical cases before the Society. When it was necessary to give up the Board Room at the City Hospital and hold the meetings in the

larger amphitheatre, the Society voted to hold dinner meetings at the Watterson Hotel, which arrangement has been continued to May, 1926."

The meetings were held for a time at The French Village. Later an invitation from Norton Infirmary was accepted. The Society then accepted an invitation from the Jewish Hospital. After meeting there for about two years it was decided to have dinner meetings at the Brown Hotel where the meetings are held at the present time on the evening of the second Thursday of every month from September to May, inclusive.

During this period of fifteen years the following officers have served creditably:

Presidents: Pfingst, Funk, Dabney, Pirkey, Baker, Watkins, Dean, Victor, Townes, Leggett, Bumgardner, Simpson, Hall and Heitger.

Vice-Presidents: Baker, Richeson, Pirkey, Beck, Townes, W. R. Pryor, Leggett, Snyder, Bell, Wolf, Funk and Heitger.

Secretaries: Maupin, Townes, Victor, Bumgardner, Craddock, Bornstein, Dean, Beck and Fish.

It is the custom of the Society to have an annual meeting, usually in January, when some outstanding Ophthalmologist or Otolaryngologist is invited to present a discussion on the subject of his choice pertaining to his specialty. These are dinner meetings held at a hotel to which it is customary to invite all members of the Eye, Ear, Nose and Throat Section of the Kentucky State Medical Association. Members are at liberty to bring as many guests as they desire. As a result these meetings are usually well attended. In 1926 J. J. Shea of Memphis, addressed the Society on "Sinusitis of Childhood." In 1927 the Society succeeded in securing Hans Brunner of Vienna, for the purpose of a special course on "Cerebral Complications." This course lasted almost two weeks and was subscribed to by most members of the society. Because of this course the annual dinner was omitted. There is no mention of an annual dinner for 1928. Wm. Mitthoefer was invited for 1929 but there is no record as to whether he came. In 1930 Arthur Bedell of Albany, New York, showed slides demonstrating various phases of fundus examination. The guest for 1931 was Lawrence T. Post, of St. Louis. His subject was "Thermophore in Relation to Diseases of the Eye." Sam Iglauer of Cincinnati accepted our invitation for 1932 and spoke on "Deep Suppuration in the Pharynx and Neck as it Con-

cerns the Laryngologist."

The first record in the minutes of the society's lending its guest to the Jefferson County Medical Society, occurred in 1933 when L. C. Peter of Philadelphia, was the guest. His subject was "Recent Advances in Squint." In 1934 Ralph Almour of New York, addressed the Society on "Key to Classification and Treatment of Aural Suppuration." The Society enjoyed an extra guest in 1934, in the person of D. T. Vail of Cincinnati, who spoke on "The Ophthalmologist Looks At Dachryocystorhinostomy." There were two guests in 1935 also. H. J. Howard of St. Louis was, the guest at the annual meeting. His subject was "The Practice of Modern Medicine in the Field of Ophthalmology." At the March meeting, E. C. Yates of Lexington, addressed the Society on "Zinc Ionization Treatment in Hay Fever." Also in 1936 two guests addressed the Society. L. C. Jackson, Jr., of Philadelphia, talked on "Bronchoscopy as an Aid in Diagnosis and Treatment," at the annual meeting. Chas. N. Spratt of Minneapolis, wrote offering to show "Moving Pictures of Eye and Mastoid Operations." His offer was accepted and he entertained the Society in March. John Kolmer of Temple University, was the 1937 guest. His subject was "Syphilitic Involvement of the Eye." He also addressed The Jefferson County Medical Society. M. M. Cullom of Nashville addressed the 1938 annual meeting on "The Effects of Sinusitis on Middle Ear and Mastoid Disease." The Society turned to Tennessee again in 1939 for instruction at the annual meeting. E. C. Ellett of Memphis accepted the invitation and spoke to the Society on "Dachryocystorhinostomy." He had the largest attendance on record, one hundred and one. Following the dinner meeting Dr. Ellett addressed The Jefferson County Medical Society on "Glass Ball Implants." Hans Brunner of Chicago, formerly of Vienna, closes the list of the notable leaders in medical thought who have been kind enough to share with the members of the Society the results of their industry and study. He spoke very ably at the 1940 annual meeting on "Histopathology Following Radical Mastoidectomy."

The Society, through a committee, secured a promise in 1926 from The Board of Education of a class for deaf children. The League for Hard of Hearing was organized in 1926. In 1927 the treasury was considered too plethoric so a social dinner for members was held at the Kentucky Hotel at the expense of the treasury. In



1932 a committee composed of Drs. Pfingst, Leggett and Krieger was appointed to confer with the Board of Education on Sight Saving Classes. Progress was reported in 1933. In 1935 one class was in operation. Beck volunteered his services in was felt necessary by the Board of Education. C. K. Beck volunteered his services. In 1938 the March meeting was held at the amphitheater of the City Hospital and the meeting turned over to Miss Mary May Wyman of the Board of Education. She put on a splendid program, demonstrating what was being done in the Sight Saving, Hard of Hearing and Speech Defect Classes.

Last year the Southern Optical Company presented the Society with an excellent projector for both slides and opaques.

During the fifteen years the Society lost by death in 1934 Sam Weinberg, in 1935 S. G. Dabney and Walter J. Leach, in 1937, Curt Krieger and in 1939, our president at the time, Austin Funk.

Only one of the original organizers of 1899 mentioned in Dr. Robertson's sketch survives, A. O. Pfingst. Almost all eligibles to membership in Louisville, New Albany and Jeffersonville have at one time held membership in the Society. Several have dropped out and several have moved away. The roll stood as of December 31, 1939 at thirty-five, which is about two-thirds of those eligible. One member, W. S. Snyder, is of Frankfort.

During the fifteen years regular meetings have been held with very few exceptions. Only one meeting failed because of lack of quorum.

#### **Sulfathiazole for Pneumococcic Pneumonia.**—

Volini and his associates treated 169 patients having pneumococcic pneumonia with sulfathiazole by mouth. There were 9 deaths, a 5.3 per cent mortality. A control series in which sulfapyridine and serum combined were used showed a mortality of 4.2 per cent. The mortality in the bacteremic group was higher with sulfapyridine treatment. Sulfathiazole is apparently as effective as sulfapyridine. Sulfapyridine appeared more effective in type I and III infections, whereas sulfathiazole produced better results in types II and VII infections. Nausea, vomiting and the other common toxic manifestations of sulfapyridine therapy were much less frequent with sulfathiazole. Drug fever and especially the papulonodular eruption with conjunctivitis were the severe toxic manifestations of sulfathiazole medication. The blood concentration level varied considerably in the same patient on a maintenance dose of 1 Gm. every four hours.

## **PENTOTHAL SODIUM ANESTHESIA AS USED IN A SMALL HOSPITAL**

KATHERINE FISHER, M. D.

Murray

Ever since painful surgical procedures have been used there has been a demand for an ideal anesthetic. Until the introduction of ether in the 1840's by Crawford Long and William T. G. Morton, alcohol was the favorite. Intravenous Anesthetics heretofore have had many drawbacks and have been little used because of many prejudices.

It is striking that an anesthetic such as pentothal sodium which is administered directly into the circulation should become popular so soon after its introduction. The fact that this drug is so quickly broken down in the body makes it compare favorably with an inhalation anesthetic in safety and controllability. Further adding to its popularity is the absence of psychic shock on induction, freedom from vomiting, the absence of toxicity and its pleasantness for the patient.

Pentothal sodium was first offered for use in 1934 and since that time it has steadily increased in usage. In November 1939, a review of the literature by Ruth & Tovell et al (1) disclosed that 21,344 cases had been reported at that time. In September, 1940, Lundy & Adams (2) reported 16,500 of their own cases.

Pentothal sodium is an ultra short acting thiobarbiturate, yellow in color and readily soluble in water. The solution is unstable and should be freshly prepared the day of surgery.

**PHYSIOLOGY:** Induction with pentothal sodium is short and pleasant to the patient and recovery is usually quick, simulating the awakening from a natural sleep. The patient frequently cannot remember going to sleep and usually describes the experience as most pleasant.

Ruth et al (1) reviewed blood studies on twenty-five consecutive unselected cases and found only a slight rise in blood sugar at the conclusion of the operation. Studies have also been made as to urea, N. P. N., uric acid, creatinin, coagulation, bleeding time, cholesterol, icteric index, hemoglobin and white blood count, with no changes of significance.

Electrocardiograms taken by Ruth et al (1) before, during and after pentothal so-

dium anesthesia and examined by Starr were normal and remained normal throughout their experiments. Electrocardiograms taken by Carraway (3) before, during and after pentothal sodium were essentially normal. Dr. George Thomas (4), Pittsburg, reports a case in his experience of a patient who had had a coronary occlusion two years previous to admission. He writes "An electrocardiogram showed evidence of bundle branch block due to infarction in the ventricular septum. Numerous premature beats were present. During and after anesthesia the rhythm became regular and the premature beats disappeared. Therefore, I feel that the more serious a cardiac condition in a case in which operation is necessary, the more indication there is for pentothal sodium."

There is often a very slight fall in blood pressure during anesthesia with this drug. There is also an initial increase in pulse rate which usually returns to about normal soon after induction.

Liver function tests as reported by Carraway (3) were normal, whereas during and after other anesthetics, its function is reduced. Pentothal sodium is believed to be broken down and detoxified in the liver and theoretically severe liver damage is a contraindication to its use.

There is apparently no change in urinary secretion (1).

Hiccups, sneezing, temporary closure of the glottis and a hyperactive state of the laryngeal reflex with frequent coughing are complications that occasionally occur with this type of anesthetic. These effects are believed to be due to parasympathetic overactivity (1). For this reason it is always well to administer atropine or scopolamine preoperatively to counteract this parasympathetic overactivity.

Respiratory depression occurs in direct proportion to the speed of injection of the solution (1). The volume of respiration is decreased as the depth of anesthesia is increased. Experience is necessary to determine the proper rate of injection. A 2½ per cent solution is much easier to control in this respect than a 5 per cent solution which has been advocated. No postoperative pulmonary complications have been reported.

Intestinal activity is at first depressed but this initial depression is followed by an increased tonus (1).

USES: Pentothal sodium has a field of usefulness aside from being used as an anesthetic agent for surgery. It is being

used in obstetrics (5) (6) (7) and in medico-legal cases to interrogate patients (8). It may be used for diagnosis and prognosis in Raynaud's disease and essential hypertension (8). It may also be used for the control of convulsions from toxic drugs, tetanus and eclampsia. I used it in one case of tetanus with satisfactory results as far as the control of convulsions was concerned. In this case it was used for the initial control of convulsions and avertin with amylene hydrate was used for the maintenance of control. The patient succumbed to an embolism later.

PREMEDICATION: When pentothal first came into use it was believed that either no premedication or only small doses of premedication should be given due to depressing effect on the respiration of both morphine and pentothal. More recently anesthetists are recommending Nembutal gr. 1½ with small doses of morphine and ordinary doses of atropine or scopolamine, or the ordinary doses of both morphine and scopolamine. Far less quantities of the drug are needed when preoperative medication has been given and better relaxation is obtained. The atropine or scopolamine are particularly indicated to prevent laryngeal spasm and to reduce excessive secretions.

TECHNIQUE OF ADMINISTRATION: In my experience I have used a 2.5 solution of pentothal sodium exclusively. I have considered that with this percentage solution there is better control of the anesthetic agent than with the 5 per cent solution. Originally 20 to 30 seconds was considered adequate time for induction but more recently it is believed to be safer to take one to two minutes for induction (1).

The maintenance of an adequate airway is of the greatest importance. For artificial airways the naso-pharyngeal airway is to be preferred. Cyanosis should never be tolerated.

In the event that marked respiratory depression should occur, temporary discontinuance of the injection will frequently permit its return to normal. If the respiration should not respond readily or should cease, metrazol or picrotoxin given through the intravenous needle in place, combined with artificial respiration with oxygen by intermittent pressure on the breathing bag, will readily initiate respiratory effort.

In January 1939, Dr. Hellmut Weese (9) gave a discussion of the use of pentothal sodium in operations for sublingual phleg-



mons and abscesses occurring in the anterior triangle of the neck. In this type of case pressure over the carotid sinus during the first five minutes of anesthesia has occasionally produced irrevocable respiratory paralysis. It is recommended in this type of case that the operation should not be started until the anesthetic has been in progress five or more minutes, to allow sufficient time for the vagus to become anesthetized.

**SHORT OPERATIONS** (two to ten minutes): Following premedication the patient is placed on the operating table with one arm extended on an arm board. A luer containing 20 cc. or 40 cc. of a 2½% solution of pentothal sodium is used. A 20-gauge needle is very satisfactory. Venipuncture is made and following the injection of about 4 or 5 cc. of solution, the injection is stopped for about 30 seconds during which time the patient is asked to count slowly. In a few instances this amount will be sufficient to produce surgical anesthesia but usually more anesthetic is needed. If the patient is not asleep an additional one or 2 cc. is given followed by a pause of 15 to 30 seconds. This is again repeated until sleep is produced. The dosage varies markedly in different patients. One of my patients required about 40 cc. of a 2½% solution before relaxation occurred. During the operative procedure an additional one or 2 cc. is given when indicated by increased volume of respiration, swallowing, or movement of the hands or feet.

**OPERATIONS OF MODERATE DURATION** (10 to 30 minutes): The technique of injection is essentially the same with the exception that a syringe holder is clamped to the arm board and during the first pause, the syringe is placed in its holder and a rubber tubing is connected from the syringe to the needle. This adds considerably to the convenience of administration and if the patient should move unexpectedly, the needle is not so apt to be displaced. In addition, oxygen is administered through a nasal catheter at the rate of 4 liters per minute.

**LONGER OPERATIONS:** For longer operations, an intravenous infusion of saline is started with a two-way stop cock attached to the needle. The syringe holder, syringe, and rubber tubing are arranged on the arm board in the usual manner with the rubber tubing connected to the other passage of the two-way stop cock. Anesthesia is induced in the same manner as for shorter operations, but during pauses between injections of pentothal, the saline solution is allowed

to run through the needle. This keeps the needle free from clotting as well as supports the general condition of the patient. Glucose is not ordinarily used for this infusion as a precipitate is occasionally formed between the pentothal and glucose. Oxygen is given the same as for operations of moderate duration. The eyeball is fixed early and when fairly good relaxation is desired the depth of anesthesia must be gauged by the amount of relaxation of the jaw and the depth and frequency of respiration.

**CONTRAINDICATIONS:** Pentothal sodium should not be used when there is any interference with the respiratory function (1). Theoretically it should not be used in cases of severe liver damage. Varicosities central to the point of injection interfere with its even administration and contraindicate its use (1). Some anesthetists claim that it is unsafe to use in the presence of asthma (8) (10) whereas others claim satisfactory results in the presence of this disease. It should not be used in cases with marked arteriosclerosis or in the presence of cardiac decompensation with dyspnea (8). Caution is advised in its use in the presence of severe anemias (1) (8). Administration to children under ten years of age has not been entirely satisfactory in all hands (11) and ages below ten probably should contraindicate its use. Some question the advisability of using it in abdominal surgery (1). Carraway (3) uses it with oxygen for abdominal surgery and reports very favorably on its relaxation and his results generally. Lundy (12) uses it for abdominal surgery combined with local block and inhalation of 50 per cent nitrous oxide and 50 per cent oxygen. He infers that it is not as satisfactory in robust as in weak individuals. My limited experience with this drug in abdominal surgery has been fairly satisfactory. In two cases the relaxation obtained was not adequate. These two patients were rather robust individuals. Most anesthetists advise against the use of pentothal during sulfanilamide therapy (13). Pentothal sodium should not be used in office practice where measures for artificial respiration with oxygen under pressure are not available. Also analeptics such as metrazol and picrotoxin should always be at hand for use in case of severe respiratory depression. If uncontrollable complications should occur there should be no hesitation about shifting to another anesthetic agent.

**APPLICATION:** Pentothal sodium is es-

pecially applicable in operations of short and moderate duration where muscular relaxation is not needed. Its use in dental and oral surgery is becoming more popular (10) (14) (15). Many orthopedic men are using it quite universally (16). It is becoming the anesthetic of choice for many urologists. Many gynecologists are asking for it in all their minor work. Many anesthesiologists are using it for basal or routine induction for other types of anesthesia, also for supplementary anesthesia of spinal, local and block anesthesia (1). It is an ideal anesthetic for other minor surgical procedures such as lancing boils, opening abscesses, myringotomies, etc. It is non-explosive and can be safely used to supplement spinal, local or block in the presence of the cautery. It can be safely used in the X-Ray room without danger of explosion. There is an ever increasing demand on the part of patients for this type of anesthetic. Once patients have had pentothal sodium for surgical procedures they have asked for this same type of anesthesia for any subsequent surgical procedures.

I have used pentothal sodium for 175 cases of surgery and have been very well pleased with my results. A summary of my cases is as follows:

Appendectomies	8
Cholecystectomies	2
Hysterectomies and salpingectomies	2
Thyroid	1
Tuberculous glands of the neck	1
Parotid tumor	1
Fractures, dislocations & osteomyelitis	44
Gynecology (minor)	39
Dental and oral	14
Rectal	8
Breast amputation and tumors of breast	3
Incision and drainage and lacerations	43
Retropharyngeal abscess	1
Myringotomies	3
Stab wound of chest	1
Circumcision	1
Tonsillectomy	1
G. U.	2

COMPARISONS: Oldest patient 86. Youngest patient 9. Maximum amount of the drug used 90 cc. Minimum amount of the drug used 5 cc. Shortest duration of anesthetic 2 minutes. Longest duration of anesthetic 2½ hours. Pentothal has been repeated as many as five times on one patient with no harmful results. No post-operative pulmonary complications. No anesthetic deaths. Date first used April 14, 1939.

SUMMARY: Pentothal sodium anesthesia is becoming an increasingly popular

anesthetic. It has very little effect in altering the normal body processes. It has short induction and recovery periods and is pleasant to the patient. Small or ordinary doses of premedication given preoperatively reduce the amount of anesthetic needed. Experience is necessary to determine the proper rate of injection. It is essential to maintain an adequate airway and in operations of moderate or long duration, oxygen inhalation should be used. It should not be used in the presence of respiratory obstructions, severe liver damage, cardiac decompensation, or in any condition in which there is marked interference with the oxygen carrying capacity of the blood. It is experiencing an ever increasing field of usefulness and in my experience has proven very satisfactory.

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# Kentucky Medical Journal

Published Monthly By  
THE KENTUCKY MEDICAL ASSOCIATION  
Incorporated

Entered as second class matter October 22, 1906, at the Postoffice at Bowling Green, Ky., under act of Congress, March 3, 1879.

Subscription Price .....\$5.00  
Edited Under the Supervision of the Council

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NEXT MEETING LOUISVILLE

SEPTEMBER 29—OCTOBER 3, 1941

## COUNTY SOCIETY REPORTS

**Caldwell:** At a meeting of the Caldwell County Medical Society, held in Princeton, it was decided to cooperate in the holding of a clinic for the treatment of tonsillar conditions, including the removal of tonsils, for indigent school children, under the auspices of the County Health Department. W. C. Haydon, W. L. Cash and I. Z. Barber were named to confer with the Health Officer, J. M. Dishman, in arranging the clinic, which will be held in Princeton.

The following officers were elected for 1941: I. Z. Barber, President; J. M. Moore, Vice-President; W. L. Cash, Secretary; W. C. Haydon, Delegate to State Association; J. M. Dishman, Alternate; B. K. Amos, new member of the board of censors.

W. L. CASH, Secretary.

**Four County:** The Four County Medical Society, composed of physicians residing in Caldwell, Crittenden, Lyon and Trigg Counties, met in Princeton, Tuesday night, February 25th, and following dinner at the Princeton Hotel the following program was rendered: Pneumonia, Austin Bell, President, State Medical Association, Hopkinsville; Tuberculosis, illustrated with lantern slides, Paul A. Turner, Hazelwood Sanatorium, Louisville. A general discussion followed, and valuable points were elicited. There were twenty-two physicians and one dentist in attendance. The dentist was B. L. Keeney, Princeton, who was admitted to membership in the Society. Fees of \$3.00 for one, or \$5.00 when both parties to a marriage consult the same physician, were fixed as guides in making premarital examinations as required by the State law. The retiring president, D. J. Travis, Eddyville, presided and the following were elected as officers of the Society for 1941: W. C. Haydon, Princeton, President; John Futrell, Cadiz, vice-president; W. L. Cash, Princeton, secretary-treasurer; re-elected. W. C. Haydon, the new president, appointed the following program committee, each to be responsible for the program when the Society meets in their respective counties: John Futrell, Trigg County; J. O. Nall, Crittenden County; C. P. Moseley, Lyon County; Frank T. Linton, Caldwell County. The next meeting of the Society will be held in Marion, Crittenden, County.

The following were in attendance: Paul A. Turner, Louisville; Austin Bell, Gant Gaither, W. E. Gary, Hopkinsville; C. P. Moseley, D. J. Travis, Eddyville; T. L. Phillips, Kuttawa; John G. White, G. E. Hatcher, Cerulean; John Futrell, L. A. Crosby, Cadiz; J. O. Nall, T. A. Frazer, Turner Pursley, Marion; W. C. Haydon, Frank J. Linton, J. M. Moore, Kenneth L. Barnes, J. M. Dishman, L. E. Nichols, C. B. Walker, W. L. Cash, B. L. Keeney, dentist, Princeton.

W. L. CASH, Secretary.

**Hopkins:** The Hopkins County Medical Society held a dinner meeting at the Hopkins County Hospital, Madisonville, March 13th, at 6:30 P. M.

Following the meal papers were presented by M. S. Veal, F. A. Scott and Wm. H. Garnier.

Mr. J. F. Mohaupt, representing The Lactogen Company, gave a short discussion of the use of Lactogen in infant feeding.

The next meeting of the Society will be April 10th.

The following members of the Society were present: M. S. Veal, A. F. Finley, I. J. Townes, W. L. Moore, C. H. Foshee, J. R. Corum, J. E. Haynes, W. L. Morse, F. A. Scott, F. P. Strother, A. W. Davis, C. R. Morton, C. B. Johnson, Wm. F. Stucky, J. D. Sory and Wm. H. Garnier.

WM. H. GARNIER, Secretary.

**Johnson:** The Johnson County Medical Society met in the Johnson County Health Department quarters Monday, February 24. Mr. R. Wilson of the Farm Security Board gave a very interesting talk of the Farm Security Borrowers.

Those present were Paul B. Hall, W.E. Akin, Jr., J. A. Wells, J. H. Holbrooks, James Archer, F. M. Pickleaimer, E. W. Kissel, and A. D. Slone, all of Paintsville and J. M. Alexander, and Chas. McEwen of Van Lear, Kentucky. Mr. R. Wilson was a guest.

A. D. SLONE, Secretary

**Madison:** The regular meeting of the Madison County Medical Society was held February 20, at the U. S. Trachoma Hospital with Wilson Dodd, President, presiding. Members present were: Robert Sory, H. Mahaffey, S. G. Carr, Kennett Wright, J. D. Farris, R. H. Payne, Wilson Dodd, R. L. Rice, J. W. Armstrong, and C. B. Marcum. Non-member present was D. M. Munnell.

The meeting was opened by the president at 7:45 p. m. and the minutes of the previous meeting were read by the Secretary and were approved.

The Board of Censors reported with the recommendation that D. M. Munnell be voted a member. Vote followed which was unanimous in favor of the Board's recommendation.

Scientific session: W. F. Dodd, R. H. Payne and H. Mahaffey gave short reviews of interesting articles in current Medical Journals. Kenneth Wright gave a very interesting paper on pneumonia with emphasis on the laboratory side of diagnosis and treatment. He presented as illustration, five cases treated in the Berea College Hospital. Discussion followed the presentation of each case, the meeting adjourned at 9:45 p. m.

C. B. Billington and H. C. Blanton left in January with the local National Guards for a year's training at Camp Shelby, Mississippi.

M. M. Robinson returned last week from a two weeks visit in Florida, where he was recovering from a sinus infection.

John H. Rutledge left February 20, for a two weeks vacation through Florida and Louisiana.

ROBERT L. RICE, Secretary.

**Hopkins:** The Hopkins County Society held its first meeting of the year at the local hospital February 20, 1941. The following officers were elected to serve for one year: John E. Haynes, Dawson Springs, President, F. A. Scott, Madisonville, Vice-President, and Wm. H. Garnier, Madisonville, Secretary and Treasurer. The outgoing officers are A. F. Finley, President, I. J. Townes, Vice-President and D. L. Salmon, Secretary and Treasurer.

It was decided that monthly meetings will be held at the hospital on the second Thursday of each month, at which time case reports and papers will be presented.

Other business included the election of A. F. Finley, Madisonville, as delegate to the State Meeting, with Clyde H. Foshee as alternate. A board of Censors, composed of Drs. Robinson, Corum and Veal, all of Madisonville, was appointed by the President.

The following members of the society were present: Drs. Finley, Moore, Veal, Robinson, Foshee, Morton, Davis, Corum, Scott and Garnier, all of Madisonville, J. E. Johnson, Nortonville, J. E. Haynes, Dawson Springs and Mr. Frank Bauman, Nashville.

W. H. GARNIER, Secretary

**Rockcastle:** The Rockcastle county Medical Society met December 6th, 1940 at the Dixie Boone Hotel, Mt. Vernon, with all active members present. After the usual meal at 6:30 p. m., the meeting was called to order by Walker Owens who introduced the speakers: T. A. Griffith, Mt. Vernon, Coronary Occlusion; George McClure, Danville, Diagnosis of the Surgical Abdomen in General Practice. The papers were discussed by all members and guests present. Dr. McClure had a friend as guest, and Dr. Laswell was present from Lincoln County. Meeting adjourned. The January meeting was discontinued because of influenza epidemic. February 7, 1941 W. E. McWilliams, Brodhead, Venereal Prophylaxis. Discussion followed. At this meeting the present officers were reinstated for another year. Representatives from the Farm Security Agency were present and the society selected a committee to work with this agency. The epi-



demics and the selection of young men into service along with an influx of war babies is producing a critical situation. The one remedy is to continue medical training the year round at this moment of crisis. This society has only six active member, three physicians in the county are unable to attend. Although the society is an important part of the profession, there is not full cooperation.

LEE CHESTNUT, Secretary.

**Warren-Edmonson:** The Warren-Edmonson Medical Society held its regular February meeting Tuesday night, February 18th, 1941, beginning with a dinner at the Helm Hotel. Dr. Francis Massie, of Lexington, gave a paper on Uterine Bleeding, the discussion was led by W. O. Carson and Hal Neel. D. B. Harding, Lexington, gave a lantern slide lecture on X-Ray Aspects of Childhood Tuberculosis, the discussion was led by Fred Reardon. Election of officers was held and the following officers elected for 1941, L. O. Toomey, Bowling Green, President; Finis London, Woodburn, Vice President; and W. O. Carson, Bowling Green was reelected Secretary-Treasurer. The Warren-Edmonson Society meets on alternate months, alternating with the Third District Society which also meets in Bowling Green.

W. O. CARSON, Secretary.

#### NEWS ITEMS

The Laboratory of the State Department of Health is very fortunate in securing the services of Miss Aimee Wilcox of the National Institute of Health, for the purpose of training laboratory technicians, county officers and physicians in the preparation, staining and examination of thick and thin blood films for malaria parasites. Miss Wilcox has probably the greatest collection of malaria slides in America. Many doubtful cases can be recognized as positive malaria with the new method of thick and thin blood films.

For the past several years the State Department of Health has had the services of Miss Wilcox for several days each spring and physicians and their assistants, who are interested, have been invited to take advantage of this excellent opportunity.

E. L. Shiflett, M. D. announces entrance into individual practice of diagnostic x-ray at 1010 Heyburn Building, hours 8 to 5, having by mutual and cordial agreement assumed the office practice of the dissolved firm of Drs. Keith, Keith and Shiflett. D. Y. Keith, M. D. continues to maintain a joint office for therapy and consultation.

Dr. Hubert M. Meredith, Scottsville, died Sunday, February 16th, at a Nashville, Tennessee, hospital at the age of 62. He had been a member of the Scottsville Board of Education and City Council.

Dr. C. E. Francis, Bowling Green, died February 24th. He was graduated from the Medical Department University of Louisville, and practiced his profession at Richdsville for a short time, then moved to Nebo, later returning to his former residence. In 1922 he opened an office in Bowling Green and served as coroner for many years.

Dr. Ollie P. Clark, former president of the Clark County Medical Society and a member of the Kentucky State Medical Association, died at his home in Winchester.

Dr. Lee A. Dare, Health Officer in Anderson County for the last five years, resigned to take a position as Medical Examiner for the Hoosier Ordnance Works at Charlestown, Indiana.

Dr. J. N. Clark, formerly of Warren County, died in Indianapolis, at the age of 84 years.

Dr. Robert Brodie, of Owensboro, a graduate of the Medico-Chirurgical College of Philadelphia in 1899 died at the age of 66, December 27, 1940 in a Louisville hospital of pneumonia following an operation for removal of an oyster shell from his esophagus.

Dr. John Helm was elected president of the Jewish Hospital staff to succeed Dr. Karl N. Victor, H. A. Cross, superintendent, has announced. Other officers elected were vice-president, Dr. J. M. Frehling, secretary-treasurer Dr. S. S. Gordon.

The Jefferson County Medical Society and their guests which included physicians from the various sections of the state, were particularly fortunate in hearing an address of Dr. Frederick H. Falls, Professor of Obstetrics and Gynecology, University of Illinois College of Medicine, Chicago, on Toxemias of Late Pregnancy. This address was given under the auspices of the Louisville Obstetrical and Gynecological Society.

The Credit and Rating Bureau of the Jefferson County Medical Society has grown to such an extent that it has been necessary to add additional space on the second floor of the Heyburn Building, Louisville. Two more filing cases have been ordered to care for the volume of credit reports.

fifty doctors, railway officials and visitors attended.

Dr. W. E. Dale, of 708 South Brook Street, Louisville celebrated his fiftieth year of medical practice.

The New York Post Graduate Medical School offers a course in Recent Advances in Tropical Medicine for five days, May 19 to 23, 1941. There will be lectures on the following topics:

**MALARIA**—Dr. Lowell T. Coggeshall, Rockefeller Institute for Medical Research.

**YELLOW FEVER** — Dr. Johannes Bauer, Rockefeller Institute for Medical Research.

**INTESTINAL PARASITES (Helminths)**—Dr. Norman Stoll, Rockefeller Institute for Medical Research.

**FILARIASIS (Diagnosis)** — Mrs. Constance Hulse, formerly technician to the late Dr. F. W. O'Connor.

**AMEBIC DYSENTERY**—

1. Pathology, symptoms and treatment—Dr. Thomas T. Mackie, Assistant Clinical Professor of Medicine, College of Physicians and Surgeons, Columbia University, and Roosevelt Hospital.

2. Culture of amebae and the complement fixation reaction—Dr. Ralph Nauss, Instructor in Public Health and Preventive Medicine, Cornell University Medical College.

3. Differential diagnosis with special reference to cellular exudates and complications of amebiasis, and their treatment—Dr. Z. Bercovitz.

4. Demonstration of diagnostic methods—Dr. Z. Bercovitz and Staff.

**BACILLARY DYSENTERY**—

1. Bacteriology—Dr. Ralph C. Muckenfuss, Director, Bureau of Laboratories, Department of Health, City of New York.

2. Epidemiology—Dr. Samuel Frant, Epidemiologist and Director, Bureau of Preventable Diseases, Department of Health, City of New York.

3. Diagnosis and treatment—Dr. Z. Bercovitz.

**TROPICAL SKIN DISEASES**—

Yaws, syphilis, dermo-leishmaniasis, pinta—Dr. Howard Fox, Consulting Dermatologist, Bellevue Hospital.

**KALA AZAR**—Dr. Claude E. Forkner, Assistant Professor of Clinical Medicine, Cornell University Medical College.

**LEPTOSPIROSIS**—Dr. Elliston Farrell, Assistant Clinical Professor of Medicine, Long Island College of Medicine.

**RELAPSING FEVER AND RAT BITE FEVER**—Dr. Elliston Farrell.

**TRICHINOSIS**—Dr. Z. Bercovitz.

**ECCHINOCOCCUS**—Dr. James T. Culbertson, Assistant Professor of Bacteriology, College of Physicians and Surgeons, Columbia University.

**DEFICIENCY DISEASES**—Dr. Thomas T. Mackie.

**LYMPHOGRANULOMA VENEREUM** — Dr. Arthur W. Grace, Professor of Clinical Dermatology and Syphilology, Long Island College of Medicine.

**SANITARY ENGINEERING**—

1. Water supply.

2. Septic tanks, sewage disposal.

3. Malarial prophylactic drainage methods —Dr. Earle B. Phelps, Professor of Sanitary Science, College of Physicians and Surgeons, Columbia University.

Fee for the course is \$50.00.

For further information write to the Director, Dr. Z. Bercovitz, 309 E. 29th Street, New York City.

Region II Group of the American Academy of Pediatrics is to hold a meeting at the John Marshall Hotel, Richmond, Virginia April 24-25.

The subjects for round table discussion will be set around the child in relation to national defense.

The first subject to be discussed will be Mental Health of the Child as Related to National Defense.

Second: Nutrition of the Child as Related to National Defense.

Third: Communicable Diseases and Their Relation to the Child During National Defense.

Food contamination and poisons will also be discussed.

These meetings are open to any physician who is interested in any of these topics.

Three twenty-five-year service pins and twelve fifteen-year pins were awarded to eighteen physicians by the L. & N Railroad at a banquet sponsored by the Cumberland Valley Association of Railway surgeons at Pineville, March 1st.

Dr. W. K. Evans and Dr. J. T. Evans, Middlesboro, and Dr. B. E. Giannini, Kenvir, were presented with twenty-five-year service buttons by J. J. Donohue, general attorney of the railroad. Physicians awarded fifteen-year buttons were H. K. Buttermore, Liggett; J. W. Nolan, Harlan; H. S. Hodges, Alva; F. S. Smith, Corbin; P. E. Giannini, Kettle Island; S. H. Rowland, Cawood; P. O. Lewis, Evarts; J. G. Tye, Barbourville; E. M. Howard, Harlan; W. P. Cawood, Harlan; W. R. Parks, Harlan, and L. O. Smith, Harlan.

Dr. R. A. Griswold, Louisville, was principal speaker at the meeting, discussing "Treatment of Fractures From an Ambulatory Standpoint." Dr. B. F. Robinson, Lexington, presided. About



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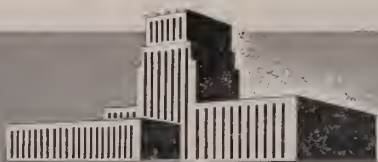
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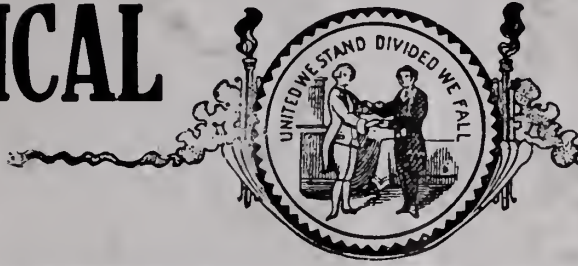
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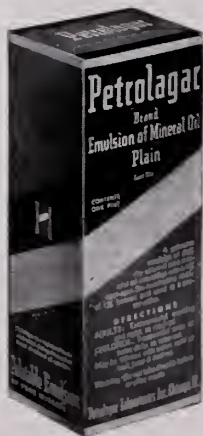
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A SOLID FOUN-  
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PRESCHOOL  
CHILDREN AND  
WATCH THEM  
THROUGH ADO-  
LESCENCE, THEY  
WILL BE READY  
FOR SERVICE  
ANYWHERE THEY  
ARE NEEDED.

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Tuberculosis  
Association  
LOUISVILLE



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## Obstetrics and Gynecology

U. F. D. Stork, M. D., F. A. C. S.

JAMES S. RICH, M. D., Roentgenologist

JOHN H. COMBS, M. D., Chief Anesthetist

JOHN A. GALLOGLY, M. D., Fellow in Surgery

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph., Gon. & Ven. Dis.*, 23, 201 (March), 1939.

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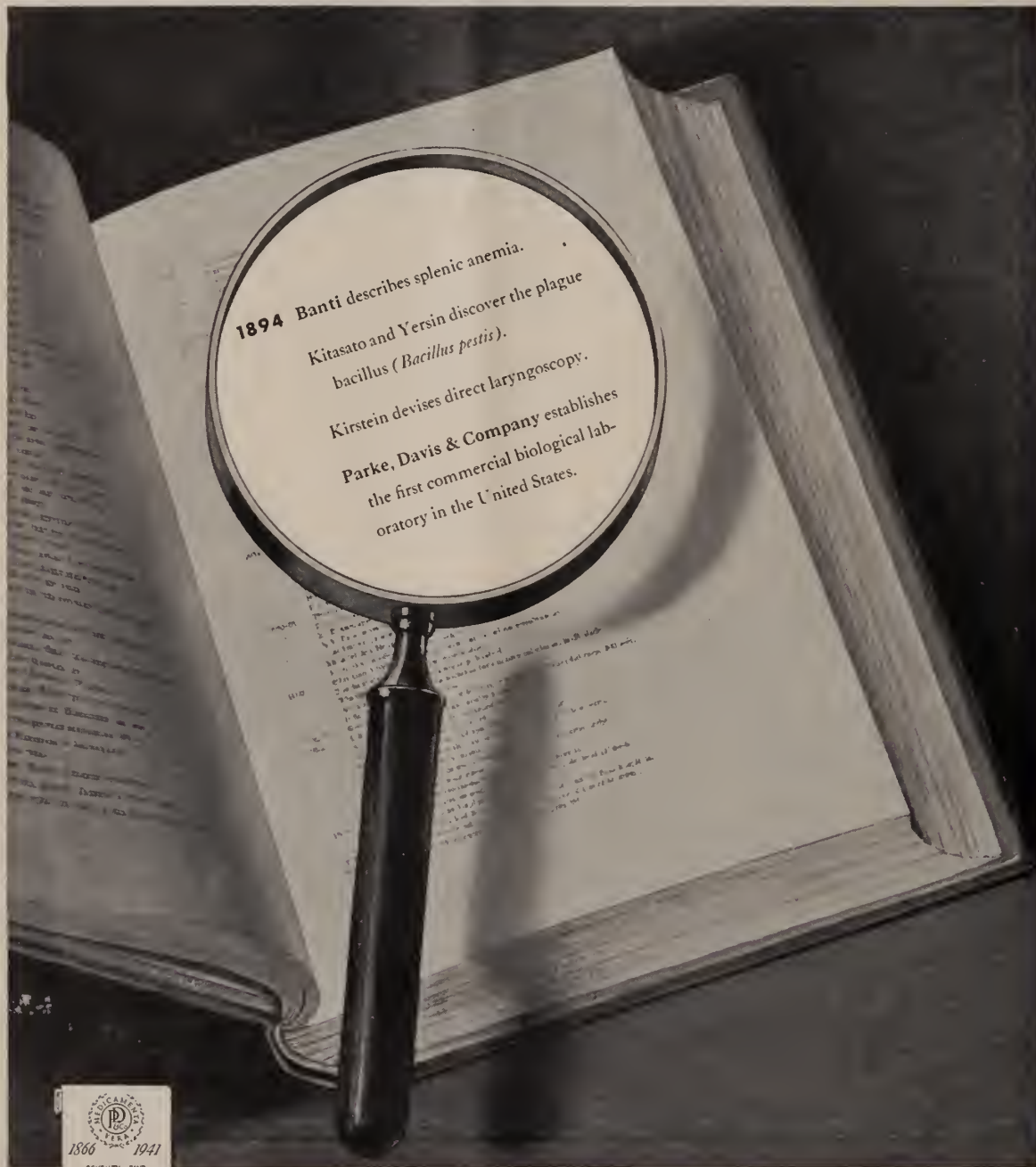
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## CALENDAR OF COUNTY SOCIETY MEETINGS

COUNTY	SECRETARY	RESIDENCE	DATE
Adair.....	Todd Jefferies.....	Columbia.....	May 7
Allen.....	A. C. Miller.....	Scottsville.....	May 28
Anderson.....	J. B. Lyen.....	Lawrenceburg.....	May 5
Ballard.....	F. H. Russell.....	Wickliffe.....	
Barren.....	R. E. Hayes.....	Glasgow.....	May 21
Bath.....	H. S. Gilmore.....	Owingsville.....	May 12
Bell.....	Edward S. Wilson.....	Pineville.....	May 9
Boone.....	R. E. Ryle.....	Walton.....	May 21
Bourbon.....	B. N. Pittenger.....	Paris.....	May 22
Boyd.....	Richard H. Gardner.....	Ashland.....	May 6
Boyle.....	P. C. Sanders.....	Danville.....	May 20
Bracken-Pendleton.....	W. A. McKenney.....	Falmouth.....	May 22
Breadthitt.....	Philip Bress.....	Jackson.....	May 20
Breckinridge.....	John E. Kincheloe.....	Hardingsburg.....	
Bullitt.....	George B. Hill.....	Mt. Washington.....	
Butler.....	D. G. Miller, Jr.....	Morgantown.....	May 7
Caldwell.....	W. L. Cash.....	Princeton.....	May 6
Calloway.....	J. A. Outland.....	Murray.....	May 1
Campbell-Kenton.....	W. V. Pierce.....	Covington.....	May 1
Carlisle.....	E. E. Smith.....	Bardwell.....	May 6
Carroll.....	H. Carl Boylen.....	Carrollton.....	
Carter.....	Don E. Wilder.....	Grayson.....	May 13
Casey.....	Wm. J. Sweeney.....	Liberty.....	May 22
Christian.....	Geo. E. Pryor.....	Hopkinsville.....	May 20
Clark.....	Robert E. Strobe.....	Winchester.....	May 16
Clay.....	L. H. Wagers.....	Manchester.....	
Clinton.....	S. F. Stephenson.....	Albany.....	May 17
Crittenden.....	C. G. Moreland.....	Marion.....	May 12
Cumberland.....	W. Fayette Owsley.....	Burkesville.....	May 7
Daviess.....	T. H. Milton.....	Owensboro.....	May 13 & 27
Elliott.....	W. H. Joyner (Acting).....	Sandy Hook.....	
Estill.....	Virginia Wallace.....	Irvine.....	May 14
Fayette.....	Douglas E. Scott.....	Lexington.....	May 13
Fleming.....	Roy Orsborn.....	Flemingsburg.....	May 14
Floyd.....	J. G. Archer.....	Prestonsburg.....	May 28
Franklin.....	Thomas P. Leonard.....	Frankfort.....	May 1
Fulton.....	M. W. Haws.....	Fulton.....	May 14
Gallatin.....			May 15
Garrard.....	J. E. Edwards.....	Lancaster.....	May 15
Grant.....	Lenore Patrick.....	Williamstown.....	May 21
Graves.....	H. H. Hunt.....	Mayfield.....	May 6
Grayson.....			
Green.....	S. J. Simmons.....	Greensburg.....	May 5
Greenup.....	L. C. Bate.....	Greenup.....	May 9
Hancock.....	F. M. Griffin.....	Hawesville.....	May 5
Hardin.....	D. E. McClure.....	Elizabethtown.....	May 8
Harlan.....	M. W. Howard.....	Harlan.....	May 17
Harrison.....	W. B. Moore.....	Cynthiana.....	May 5
Hart.....	Maher Speevack.....	Munfordville.....	May 6
Henderson.....	J. Leland Tanner.....	Henderson.....	May 12 & 26
Henry.....	Owen Carroll.....	New Castle.....	May 8
Hickman.....	Layson Swann.....	Clinton.....	May 1
Hopkins.....	Wm. H. Garnier.....	Madisonville.....	May 8
Jackson.....	Mary T. Arnold.....	McKee.....	May 3
Jefferson.....	B. W. Smock.....	Louisville.....	May 5 & 19
Jessamine.....	J. A. VanArsdall.....	Nicholasville.....	May 22
Johnson.....	A. D. Skone.....	Paintsville.....	May 26
Knott.....			May 24
Knox.....	T. R. Davies.....	Barbourville.....	May 15
Larue.....			
Laurel.....	Oscar D. Brock.....	London.....	May 14
Lawrence.....	L. S. Hayes.....	Louisia.....	May 19
Lee.....	A. B. Hoskins.....	Beattyville.....	May 10
Leslie.....	John H. Kooser.....	Hyden.....	
Letcher.....	T. M. Perry.....	Jenkins.....	May 27
Lewis.....			May 19
Lincoln.....	Lewis J. Jones.....	Hustonville.....	May 18
Livingston.....			
Logan.....	E. M. Thompson.....	Russellville.....	
Lyon.....	H. H. Woodson.....	Eddyville.....	May 6
McCracken.....	Leon Higdon.....	Paducah.....	May 28
McCreary.....	R. M. Smith.....	Stearns.....	May 5
McLean.....	Allen R. Will.....	Calhoun.....	May 8
Madison.....	Robert L. Rice.....	Richmond.....	May 15
Magoffin.....			
Marion.....	W. E. Oldham.....	Lebanon.....	May 27
Marshall.....	S. L. Henson.....	Benton.....	May 21
Martin.....			

COUNTY	SECRETARY	RESIDENCE	DATE
Mason.....	C. W. Christine.....	Maysville.....	May 14
Meade.....	S. H. Stith.....	Brandenburg.....	May 22
Menifee.....	E. T. Riley.....	Frenchburg.....	
Mercer.....	J. Tom Price.....	Harrodsburg.....	May 13
Metcalf.....	E. S. Dunham.....	Edmonton.....	
Monroe.....	George E. Bushong.....	Tompkinsville.....	
Montgomery.....	D. H. Bush.....	Mt. Sterling.....	May 13
Morgan.....			
Muhlenberg.....	E. L. Gates.....	Greenville.....	May 13
Nelson.....	R. H. Greenwell.....	Bardstown.....	
Nichols.....	T. P. Scott.....	Carlisle.....	May 19
Ohio.....	Oscar Allen.....	McHenry.....	May 7
Oldham.....			May 6
Owen.....	K. S. McBee.....	Owenton.....	May 1
Owsley.....	W. H. Gibson.....	Booneville.....	May 5
Perry.....	D. D. Turner.....	Hazard.....	May 12
Pike.....	F. H. Hodges.....	Pikeville.....	May 6
Powell.....	I. W. Johnson.....	Stanton.....	May 5
Pulaski.....	M. C. Spradlin.....	Somerset.....	May 8
Robertson.....			
Rockcastle.....	Lee Chestnut.....	Mt. Vernon.....	May 2
Rowan.....	A. W. Adkins.....	Morehead.....	May 12
Russell.....	J. R. Pappewell.....	Jamestown.....	May 12
Scott.....	A. Y. Covington.....	Georgetown.....	May 1
Shelby.....	A. D. Doak.....	Shelbyville.....	May 15
Simpson.....	L. R. Wilson.....	Franklin.....	May 13
Spencer.....			
Taylor.....	W. B. Atkinson.....	Campbellsville.....	May 8
Todd.....	B. E. Boone, Jr.....	Elkton.....	May 7
Trigg.....			May 23
Trimble.....			
Union.....	Bruce Underwood.....	Morganfield.....	May 6
Warren-Edmonson.....	W. O. Carson.....	Bowling Green.....	May 14
Washington.....	J. H. Hopper.....	Willisburg.....	May 21
Wayne.....	Frank L. Duncan.....	Monticello.....	
Webster.....	C. M. Smith.....	Dixon.....	May 30
Whitley.....	C. A. Moss.....	Williamsburg.....	May 1
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*Kugelmass: "Newer Nutrition in Pediatric Practice."*  
J. B. Lippincott Co., Philadelphia, 1940, p. 334.

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*Ariyama & Takahasi, Biochemische, Zeitschrift, vol. 216, p. 269, 1929.*

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*Marriott: "Infant Nutrition."*  
C. V. Mosby Co., St. Louis, 1930, p. 45.



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Maltose . . . . .	18%		120 cal.
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Sucrose . . . . .	4%		90 cal.
Invert Sugar . . . . .	3%	1 teaspoon . . . .	20 cal.
Minerals . . . . .	0.6%	1 tablespoon . . .	60 cal.
Moisture . . . . .	25%		

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# KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

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VOL. 39, No. 5

BOWLING GREEN, KY.

MAY, 1941

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## PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION

The American Medical Association advocates:

1. The establishment of an agency of federal government under which shall be coordinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American System of democracy.

## EDITORIALS

## DR. AUSTIN BELL

Just as he was about to address the Kentucky Hospital Association at Louisville, Dr. Austin Bell, the President of this Association, received a call from the Great Physician and he answered it. Just that!

This final event in Austin Bell's personal and professional experience was the summation of his whole life. He was always answering calls to do his duty and he always responded and did his best.

He was born at Bell's Station. His father was a large planter and land owner who served two terms in the General Assembly of Kentucky with distinction. His grandfather, a brother and a cousin were, and his two sons are, all physicians. He was graduated from the School of Medicine of the University of Virginia in 1894; served two years' internship in the City Hospital of New York City after which he returned to Kentucky and became one of the diagnostic consultants for the State Board of Health and made very definite contributions in the management of yellow fever and small pox.

He practiced in the county for several years, doing a hard general practice, then moved into Hopkinsville where he continued to practice although largely confining himself to internal medicine. He helped to organize and was a member of the Board of the Jennie Stuart Memorial Hospital.

His frequent scientific contributions to medical journals were noteworthy and he was ever a student as long as he lived.

He spent the last morning of his life in the office of the Association discussing the problems confronting the medical profession and the people that it serves. He was my guest at the Rotary Club that day and I had the privilege of presenting him to the Club as the President of the Kentucky State Medical Association. This was his last public appearance.

After the luncheon I suggested that he go upstairs and rest for a while before the meeting of the Hospital Association. He replied that he wanted to talk with his friends who were there, especially Doctor Brummitt of Middlesboro. I insisted that he rest for a while, and with that sweet smile of pleasant impatience that we who knew him expected, he said, "Why should I? I have answered calls all my life, my sons have graduated in medicine; my daughter is married to a fine physician. I

am expecting a call at any time and I have made my arrangements. I am at perfect peace and will answer the call when it comes."

No better man ever lived; no purer soul ever met its Maker.

## A TRIBUTE

On March 22, 1941 at Orlando, Florida, Doctor Louis Frank of Louisville, one of the brilliant Surgeons of his state and of the entire South, completed his efforts to serve his large clientele.

Born September 8, 1867 at Paris, Kentucky, son of Louis and Julia (Amende) Frank. Educated at Transylvania University, Lexington, Kentucky, and at Hospital College of Medicine, Central University, Louisville, receiving the Degree of Doctor of Medicine, with first honor July 1, 1888, and this entitled him to an internship at the Louisville City Hospital where he served during the year 1888-89.

Drs. Harvey Utz of Indiana, and George Spalding of Texas, who were casualties of their calling, dying of typhoid fever during the year, served with him. Doctor Achilles E. Davis of Lawrenceburg, Kentucky, who located in New York, died during the past year and was brought to Kentucky for burial, was a member of the group of internes at that time.

A lasting and close friendship developed from this contact, which was unbroken through many years and was the source of much pleasure and satisfaction. Our social and professional relations were most cordial and extended to the Kentucky State Medical Association, of which Doctor Frank was Vice President in 1911 and President in 1922, also to the American Association of Obstetricians, Gynecologists and Abdominal Surgeons, and to our beloved Southern Surgical Association, which enrolled a group of the leading Surgeons of the South, also the most distinguished Surgeons of the United States, who became Fellows by invitation and added lustre to this body of public servants.

The people of the United States know little of the value of the work of these gentlemen, who by their essays and discussions have advanced medical and surgical knowledge in our Southland, the whole country, and in the entire world, during the past fifty years.

The discussions were always vigorous and sparkling with wit, wisdom and bril-



liant style. Doctor Frank entered vigorously into these debates and the argument, because of difference in viewpoint, was most illuminating. No quarter was asked and none was given. No matter how forceful the combat, all left the argument the best of friends. Sparks fly as the result of the contact of brilliant and alert minds and great accomplishments follow.

Medicine in Kentucky retained the imprint of Ephraim McDowell, Benjamin Dudley and Samuel D. Gross of the pre-antiseptic days. David Yandell, and J. M. Holloway were the last of this school in Louisville. At the entrance of Doctor Frank into medicine the work of Lister, Tait and others was making for a new era in Surgery here. Doctor Arpad Gerster in New York and Doctor Ap Morgan Vance in Louisville, were teaching the youngsters Asepsis in the care of wounds. The combat pro and con was intense at the time, but the younger group of surgeons at last won for the newer ideas and from that time surgical procedures became so fully demonstrated that the beneficent effect was fully established. A strong advocacy of the modern methods brought Professor Frank rapidly to public notice and he was able to hold his position until his health failed. He was a great factor in the growth of Medical education in Louisville and it was in his office that a small group planned and carried on to fruition in 1898 the foundation of the Kentucky University Medical School and determined the formation of the Greater University of Louisville ten years later.

Doctor Frank was married in 1888 while an interne and finished his education in Germany, where his son, Dr. Wallace Frank, was born. The latter gentleman remains eminently equipped to carry on where his father laid down his mantle. Doctor Frank began his professorial and professional work after his return and was licensed to practice in 1893. At the time of his death he continued as Professor Emeritus of Surgery in the University of Louisville Medical School.

He was always among the front rank and strongly supported measures which he considered for the good of the Medical Profession, the hospitals and for the Community. He was prominent in the American College of Surgeons and belonged to the group of "stormy petrels" as Joseph Price, John B. Deaver, John M. T. Finney, John B. Murphy, George W. Crile, William Mayo, John G. Clark, Howard Kelly, Robert T. Morris

and our own Lewis McMurry, who carried the fight for the newer ideas. In his address before the Kentucky State Medical Association, Doctor Frank states: "Few are destined to lead but all may follow; the fighter in the forefront may and should be forgiven his aggressiveness, provided he keeps always in mind that we have passed the brute stage in our development." He was forceful enough to earn some enemies, perhaps, but he retained the affection, loyalty, and high regard of a host of grateful patients, and many social and professional friends, throughout his life.

"Requiescat in Pace."

L. GARLAND SHERRILL

### THE ANNUAL MEETING

The President-elect, E. L. Henderson, announces that the 1941 meeting of the Kentucky State Medical Association promises to be one of the best meetings this organization has ever had. Dr. James H. Pritchett, Chairman of the Program Committee, is diligently working and formulating the program. It is planned to have such a well diversified program that it will be interesting to every doctor in the state. In addition to well selected medical and surgical topics the other specialties will be represented. There will also be a symposium on medical preparedness and what is to be done about such a large percentage of our young men who have physical defects that prevent them from serving their country in the armed forces. The doctors of the military force located in the state are invited to participate in the meeting to the fullest extent. It is planned to have round table discussions each day which will be of interest and instructive to everyone.

In addition to Dr. Frank H. Lahey, President-Elect of the American Medical Association, who has accepted a place on the program, there will be several nationally known speakers.

Dr. W. O. Johnson, Chairman of the Scientific Exhibit Committee, has been making progress toward what we expect to be the best scientific exhibit we have ever had. There will also be some time devoted to motion pictures which have proved to be very instructive in the past few years.

Anyone who has any suggestions about any phase of the program, whether papers or scientific exhibits, please communicate with Dr. Pritchett or Dr. Johnson.

Though the world seems topsy-turvy and we are planning defense, and even

though we should be in actual war at the time of our meeting, the medical profession is going to carry on and do its part regardless of what we are called upon to do. Let us plan now to attend the Kentucky State Medical Association meeting and prepare ourselves to give the best as always. The meeting is at the Brown Hotel, Louisville, from September 29 to October 2.

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### THE PROGRAM

Dr. J. H. Pritchett, Chairman of the Program Committee, reports that the program for the 1941 meeting is rapidly taking form and promises to be one of the best and most out of the ordinary ever presented. Noted guest speakers have been obtained; round table discussions will form a prominent part of the program. Representatives from the military corps at Fort Knox will appear on the program, and it is also planned to have at least two outstanding members of the dental profession in Louisville to give timely papers on the close relationship between dentistry and medicine. The Councilors are active in canvassing their respective districts for available material and papers.

Please understand that it is the desire of the program committee to satisfy everybody as far as practicable. Constructive suggestions are welcome from any and all members of the Association regarding topics, clinics, round tables, et cetera. This program will be of your own making so please feel free to make any suggestions you may desire.

---

### TRICHINOSIS

Basing its calculations upon a four year study by its Zoology Division, the United States Public Health Service estimates that one-sixth of the total population of the city of Washington is infected with the Trichinosis parasite. This study included an examination of three thousand specimens of post-mortem material. If the same ratio obtains throughout the population of the country as a whole, there are today in the United States something like twenty one million people who are harboring the parasite of Trichinosis.

The Public Health Service zoologists believe that the practice of feeding raw garbage to hogs is one of the chief means of spreading trichinosis in human beings, playing a more important part in this regard than does the eating of under-cooked pork. In this connection it is interesting to

know that in January 1939 the State Department of Health of Kentucky adopted and promulgated a regulation prohibiting "the feeding of uncooked garbage or offal from the slaughter house, to swine." The Public Health Service believes that the adoption and enforcement of this prohibition throughout the United States would go far towards controlling the disease.

In all cases of suspected Trichinosis, a thin blood smear should be sent to a laboratory, either the State Department of Health laboratory or a private laboratory, for an eosinophile count. If this count is more than three per cent, a biopsy of the muscle tissue should be made to establish an accurate diagnosis. A previous history of eating slightly cooked ham, pork chops or any form of hog meat is valuable in arriving at a correct diagnosis.

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### MEDICAL CERTIFICATES TO PROSTITUTES

It has been brought to the attention of the State Health Department that prostitutes are using certificates signed by physicians purporting to show freedom from venereal disease as an aid in solicitation. This practice of giving certificates which may assist prostitutes in solicitation is dangerous because the prostitute may show no evidence of infection at the time of examination yet within a few days or hours develop frank signs of venereal disease. The State Board of Health regulations emphatically forbid the issuance of statements which may be used by prostitutes in solicitation. Physicians who find it necessary to give their patients letters about their physical condition should write them in such form that they would be impossible for prostitutes to use in solicitation.

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### THE MAY DAY BULLETIN OF THE STATE DEPARTMENT OF HEALTH

In keeping with the practice of the last several years, the May number of the State Department of Health bulletin is devoted exclusively to focusing attention on the care of the mother and the newborn. All of the articles appearing in this issue have been prepared by obstetricians, pediatricians and neuro-surgeons, and deal with some phase of maternal and child health. The subjects covered appear in the following order: Routine Care of Expectant Mothers, The Toxemias of Pregnancy, Birth Injuries, Care of the Newborn,



Anoxemia in Newborn Infants, Immunizations in Childhood, The Value of Pre-School Examination, The Communicable Disease Problem in Schools and Hospitals, Problem Children and Problem Parents.

This issue of the Bulletin will appear at about the same time as the JOURNAL. It is called to the attention particularly of the medical profession because of the generally interesting and informative character of its contents. A copy can be obtained by writing to the Bureau and Maternal and Child Welfare of the State Board of Health.

### DISHONEST CHARITY

It seems entirely anomalous to associate the two words that are the title of this editorial, but our attention has been called to one of the numerous efforts to aid our British allies by securing from the physicians of this country the samples sent them by the various pharmaceutical houses.

The average thoughtful physician divides his samples into two classes: one, the contents of which is so evidently of the commercial proprietary variety that they go into the waste basket, and any physician who sends them to an allied country would be dishonest, and, two, the other group that are valuable remedies sent out by pharmaceutical houses, whose announcements appear in this JOURNAL, or in the Journal of the American Medical Association, and are the products which merit the approval of the Council on Pharmacy and Chemistry. These are sent to us because it is hoped that they will be of value to us in our practice. We have no right to use them except for such purposes.

We believe in doing everything that each of us can and is able to do to help Great Britain, but we must help by giving something. We must give money or buy something with money because that is the only way we can exhibit honest charity.

### HOTEL RESERVATIONS

Louisville hotels are crowded at all times due to visitors at Fort Knox and Charlestown and although we have been assured of ample space to take care of every physician who wishes to attend the annual meeting, it is well for each and everyone to make their reservation now, because the hotels will not want to reserve rooms for the doctors if they are not to be occupied.

### ORIGINAL ARTICLES

#### UTERINE BLEEDING

M. J. HENRY, M. D.

Louisville

The periodic discharge of blood from the uterus has been the source of much study and conjecture from ancient times down to the present. In the light of present day knowledge many of the explanations for the occurrence of menstruation seem weird and fantastic, and lest we think these queer ideas were the tenets of the so-called "dark ages," it is well to recall that even in the past century there were many theories advanced, which today seem bordering on the superstitious. Of all the physiological processes menstruation is one of the last to be understood, and it is of very recent date that the various factors entering into its causation are coming to light.

A knowledge of the production of normal menstruation is essential to the proper understanding of uterine bleeding.

A complete consideration of the physiology of menstruation would be too time consuming; an enumeration of the factors involved should suffice.

The hormones which play a part in menstruation are elaborated by the anterior lobe of the pituitary, the thyroid, and the ovary. The ovary secretes two hormones; estrin, which is produced by the Graafian follicle and also by the corpus luteum and progesterone, which comes from the corpus luteum.

These hormones are the activating influences in normal menstruation, and hence any derangement of their interaction will produce changes in the normal menstrual cycle.

Abnormal uterine bleeding should occupy the attention of all interested in the treatment of disease, for it signifies the presence of disease, which in the majority of instances demands rapid and definite measures for its relief.

Bleeding of this type can be attributed to two causes; those which are demonstrable; and those which are not. It is to be hoped that continued research will soon make it possible to determine when there is a hormonal imbalance and thus lift that group of unknown cause into the field of those for which the cause can be definitely shown.

Bleeding may also be divided into those cases due to demonstrable disease in the

pelvic organs; and those due to systemic factors.

Of the systemic factors there are two classes; those caused by some derangement of the function of the sex hormones; and those secondary to disease in organs or tissues not a part of the reproductive system.

So far, no satisfactory test has been devised whereby one may determine the extent of hormonal secretion and thus discover the portion of the ductless systems at fault when bleeding arises from this cause. Increasing knowledge of this subject permits us to cherish the hope that before long we shall enjoy a fuller knowledge on the subject.

At the present time the treatment of so-called functional uterine bleeding is one of trial and error, always accompanied by the hope that the utilization of combined therapy may result in the cessation of the bleeding. Until recently we have had to rely on the use of the anterior pituitary, and the entrogenic hormones, but now since the corpus luteum hormone, progesterone, is available, we may hope for a decided improvement in the results of treatment.

Functional bleeding may occur at any time in the menstrual life of the individual. Those showing this symptom in the early period of sex life are usually the most difficult to control. The use of the estrogenic hormone or the hormone from the corpus luteum may be effective. This method of combating uterine bleeding in the young person often proves ineffective, and the physician will be called upon to try many measures before accomplishing the hoped for results.

Desiccated thyroid, which is most often employed in deficiencies of the menstrual flow, sometimes aids in controlling an excessive menstruation. It should be given in small doses, increasing the amount as the patient's tolerance becomes known.

Moccasin venom has been tried with some success. Vitamin K has recently been suggested, and to this may be added the now available Thyloquinine. The latter drug is a powerful hemostatic. We have used it in bleeding from various causes and find it the most powerful antihemorrhagic available.

Should these measures fail, the clinician may be forced to employ radiation therapy.

Radiation should be used in the form of radium applied directly to the uterine cavity. In its use the greatest caution should

be exercised for there is a grave danger of producing a complete cessation of the menses. Small doses should be used; preferably not over 300 millicurie hours. When the bleeding persists after such treatment, we must consider hysterectomy as less radical than the repetition of the radiation therapy. Hysterectomy conserves the ovaries and thus defers the onset of symptoms which so frequently accompany the menopause, and which are pronounced when the menopause is an artificial one.

Bleeding from nondemonstrable causes which occurs after years of normal menstrual life, is often due to failure of proper corpus luteum hormone development. It is important in cases of this type to be certain there is no organic disease. A curettage should always be done. If microscopic study of the uterine scrapings be negative, bleeding at this period of life may be satisfactorily cared for by the use of a menopausal dose of radium: 2000 millicurie hours will bring about a complete disappearance of the flow.

Uterine bleeding may be the result of some constitutional disease such as pneumonia or typhoid; disease of the blood producing tissues; debilitating disease, such as tuberculosis, syphilis, diabetes or cardio-renal impairment; toxic conditions, and also of emotional disturbances. A frequent example of the last mentioned cause is the often heard statement of patients: that though the period was not due, bleeding occurred while they were on their way to the doctor's office.

When bleeding is secondary to disease elsewhere than in the reproductive system, its relief will be dependent upon the ability to influence the underlying cause.

Another often witnessed cause of bleeding is that due to pregnancy and the effects of pregnancy.

In normal pregnancy bleeding sometimes persists for 2 or 3 months, or until there has been a complete union of the yolk sac with the uterine body. This usually is slight in amount and causes very little apprehension except for the fear of abortion. Such bleeding requires rest in bed, sedation, and the administration of progesterone.

Persistent bleeding in the early months of pregnancy indicates an abnormal implantation of the placenta, or a separation of the placenta from its point of fixation to the uterine body. If the latter condition prevails, there will be an early death for the foetus, which demands an emptying of the uterus to stop the bleeding.



This should always be done with a blunt instrument followed by curettement with gauze. In this manner the bits of placenta and membranes which cause the bleeding to persist, can be removed without the danger of the perforation of the uterus.

Mole formation, a rare sequela of gestation, sometimes gives rise to uterine bleeding. It requires careful curettage and close observation for a period of months to assure the clinician that all particles have been removed. Any retained tissue is prone to undergo malignant change, into a chorio-epithelioma. An Ascheim-Zondek test aids in disclosing the retention of pregnancy products.

Ectopic gestation is often accompanied by uterine bleeding of the spotty variety. When such bleeding is accompanied by some of the usual signs of pregnancy, physical examination plus an Ascheim-Zondek test clears up the diagnosis. Removal of the pregnancy products from their extra-uterine location controls the bleeding. When it is difficult to determine whether the pregnancy is intra or extra uterine, watchful waiting is to be observed, always being ready to do a hurried operation, should rupture of the tube occur.

Displacements of the uterus do not cause bleeding in nullipara, but in those who have borne children retrodisplacement, with or without prolapse, often plays a part in uterine hemorrhage.

After pregnancy such a uterus rarely returns to normal size, due to the interference in the circulation as a result of the poor position. In this type of disease the bleeding is usually of the menorrhagic type though it may be evident as a metrorrhagia, especially if a cervical tear be present.

Cervical tears frequently result in eversion of the endocervix, which often gives rise to bleeding. Tears may be remedied either by cauterization or plastic repair. If an erosion be present, a microscopic examination of all suggestive cervical tissue should be employed.

Bleeding may result from inflammatory disease of the uterus or the para uterine tissues. The inflammation is usually in the adnexa and is best cared for by rest, heat, and the use of drugs of the Sulfanilamide group. Should these fail, removal of the offending organs will correct the condition.

Bleeding due to neoplastic disease is the most important type which comes under observation.

The simplest benign tumor is the polyp,

which arises from the interior of the cervical canal or uterine cavity. Removal with cauterization of the base of the tumor, plus thorough curettage of the uterine cavity is all that is needed to completely remove the cause of the bleeding.

Fibrous disease and fibromyomata very often are accompanied by bleeding, sometimes of the excessive type.

Fibrous changes in the uterine musculature are often accompanied by little or no change in the size of the organ. In this disease the bleeding is usually of the menorrhagic variety. It is effectively treated by the use of a menopausal dose of radium; about 2,000 millicurie hours. Since the condition usually occurs near the end of menstrual life, the consequences of ovarian destruction need not be considered.

Neoplasms of the fibromyomatous type are usually classified as subserous, intramural and submucous. The symptoms produced and the treatment indicated are largely dependent upon the type of growth present. The subserous type does not produce bleeding, unless there is some circulatory change in it. The intra-mural type causes bleeding by producing pressure changes in the endometrium. The submucous type also produces its bleeding by causing pressure necrosis of the lining of the uterus. All three types of tumors may occur at the same time, and their diagnosis is made chiefly by the bi-manual examination; though small fibroids are often identified only by the use of the curet.

Hysterectomy is the most frequently indicated therapeutic measure in the treatment of these tumors. Radiation therapy has a place, but when employed, great care must be exercised in the selection of cases. Radiation therapy may be by the internal method; the use of radium; or the external, by the use of the roentgen ray.

The contra-indications to radiation therapy are very clearly defined by Bowring and Fricke, of the Mayo Clinic. They are:

1. Large fibromyomata that cause pressure symptoms.
2. Fibromyomata that grow rapidly or undergo softening.
3. Sub-peritoneal and submucous fibroids.
4. Fibromyomata associated with pain.
5. Large fibroids accompanied by calcareous degeneration.
6. Fibroids accompanied by anemia which can not be attributed to the bleeding.

7. Extra-uterine tumor associated with the fibroid.

8. Fibromyomata in young women.

The frequent co-existence of fibroids and cancer makes it imperative that a curettage be done before instituting radiation therapy.

By far the most important cause of bleeding to be considered, both because of the frequency and seriousness, is carcinoma.

The two types of cancer of the uterus vary greatly in their behavior and require different means to combat them.

From 85 to 90 per cent of all cancers of the uterus occur in the cervix, and over 90 per cent are of the squamous cell type. The most resistant to treatment is the small group of adenocarcinoma of the cervix.

Carcinoma of the cervix occurs more early than does carcinoma of the body of the uterus, the great majority of cases being evident from the middle to the latter part of menstrual life. It is usually found in women who have borne children, which emphasizes the part played by trauma in its development.

Often the first sign of the occurrence of this tumor is the presence of a watery discharge, which soon becomes bloody. The frequency of cervical carcinomas developing upon pre-existing tears clearly indicates the necessity of repairing such tears. Well developed cervical carcinoma offers no difficulty in diagnosis; the early cases, however, are often difficult to diagnose. The safest plan to follow is to make microscopic studies of tissue removed from such cervixes. In recent years much has been written about the value of colposcopy and the Schiller iodine test. In our hands these methods have not been very informative. These tests, when suggestive, require microscopic verification and their interpretation is often in doubt, even in the hands of an expert gynecologist. In my opinion, for these reasons, the tests have little to recommend them.

The diagnosis of a well advanced carcinoma of the cervix offers no difficulties. The epidermoid type develops on the vaginal portion of the cervix and presents as a fungoid type of growth projecting into the vault of the vagina. It soon involves the vaginal mucosa or extends into the para-cervical tissues.

Adenocarcinoma of the cervix is characterized by a definite hardness of the cervix, the induration being easily felt beyond the limits of the cervix.

Opinions on the proper treatment of carcinoma of the cervix are gradually becoming crystallized. No longer do many advocate the radical surgical removal of the generative organs, as was exemplified in the Wertheim operation. The consensus of opinion is that radiation is the more effective. Radiation should be by the combined use of radium and roentgen ray. Under the most favorable circumstances few cases are really cured. Practically all cases of cancer of the cervix are of the highly malignant type. Using Broder's classification, nearly all are of the class 3 or 4. The results of treatment are hard to determine. Approximately 35 to 40 per cent of cases, considering all degrees of extent of growth, will be living at the end of 3 years. Many of these will later succumb to the disease.

Adenocarcinoma of the body of the uterus is one of the least malignant of cancers to which mankind is subject. It occurs near or after the menopause—more frequently the latter. Its symptoms are positive and develop slowly. There is little need of any intelligent woman's dying of carcinoma of the body of the uterus.

Persistent inter-menstrual bleeding, or any bleeding after the menopause should cause the physician to suspect the type of ailment. A simple curettage with microscopic examination of the scrapings settles the diagnosis. In fact, a great many cases can be determined by the gross appearance of the scrapings. Its treatment demands the complete removal of the uterus and its appendages. In the removal of the uterus great care must be exercised to prevent the transplantation of carcinomatous cells. The few unfavorable results obtained by surgery for carcinoma of the body of the uterus, when not due to the advanced state, can often be traced to transplantation tumors in the peritoneal cavity, abdominal wall, or vagina. In an occasional case radical surgery might be contra-indicated—in such an event, radium and x-ray may be employed.

I know of no symptom to which the body is heir, that can arise from so many different causes; demand so much discrimination in diagnosis; and require so many types of treatment. These factors explain the interest in the subject and its frequent appearances as a topic before medical societies.

#### DISCUSSION

C. W. Hibbitt, Louisville: The subject of uterine bleeding has been presented in a most practical and understanding way by the essay-



ist. It is a condition seen by practically all practitioners of medicine, and at no time or age should it be considered a symptom of minor importance, its importance increasing as the age of the woman increases, especially between the years of thirty to fifty-five.

The cause should be investigated by every modern method so that a sane and practical application of the proper procedure in the way of treatment can be instituted. Early diagnosis and treatment may result in years of happy life to the patient and her family.

The hormone problem is rather complicated as yet. We know it influences menstruation. It is difficult to handle, and with the hit-and-miss trail which we are required or compelled to take at times, we may eventually get on the right track and travel to a favorable conclusion in most cases.

Our grouping of these cases for practical study is: Bleeding in those up to ten years of age; very rare, for here you can tell if the girl belongs to the endocrine group. The next class of bleeders is those from ten to eighteen years of age, or where they are developing into young womanhood, yet possibly have some endocrine question present. After that, the child-bearing period, eighteen to forty-five, which opens up another field; and then the menopausal period, and finally the senile.

On first contact with the patient there arises the question of whether the bloody flow is excessive menstruation or whether there is another cause of the bleeding. It is well in these bleeding cases to institute some therapeutic procedure to check the hemorrhage while your investigation and study of the case proceed, to find the underlying cause, so that the proper curative measures can be outlined for that particular case.

Of the remedies used to control bleeding temporarily while you are studying the case, styp-ticine in grains of 1/2 to 3/4 three or four times a day serves well in many instances. This has to be written as a narcotic, but it has absolutely no narcotic effect.

As to the cause, we find cases in the ten to eighteen age group that correspond, to a great extent, to those in the eighteen to forty-five age group, except that the endocrines do not play quite so important a part as in the ten to eighteen age group. In the bleeding cases of the forty-five to sixty-five group, malignancy probably stands as the first cause, with fibroids second.

In or between the ages of eighteen or fifty, numerous causes, as outlined by the essayist, may be responsible, but tumors and suspected malignancy should be thoroughly investigated.

I am glad to hear Dr. Henry speak his sentiments regarding the diagnosis of those cases

where the dependence is put on the colposcope and the Schiller test. These should not be relied upon entirely, but should be followed by microscopic examination of sections of tissue, and if this is not done it will surely get you in trouble at times.

In the obscure bleeding cases you will be compelled to resort to radium and x-ray. You should ever be mindful of the fact that you are applying most powerful agents to the delicate and sensitive organs of the pelvis, and under no circumstances let it produce an artificial menopause unless that particular step is indicated.

In carcinoma of the cervix, a watery discharge appearing should be the danger signal. Following this, spotting of blood from trauma of some particular kind usually follows. Now you are in the danger zone, and proper treatment at once should be instituted. Bleeding after the menopause is most suspicious, but with a curette and the microscope the cause usually can be determined.

There are numerous other causes of more or less importance as commented on by the essayist, but I feel to discuss all would be out of the question.

**W. I. Hume, Louisville:** Dr. Henry mentioned the use of vitamin K in the control of some of these bleeding cases. I have had occasion recently to review the literature on vitamin K and have had some experience with it. It seems that we cannot tell by a prothrombin test when vitamin K is indicated and when it will be effective. Damm, of Copenhagen, discovered the coagulation vitamin in 1934, and Quick in this country and Almquist and Close and members of the University of Iowa group and of the Mayo group, have done a lot of work on the subject. There is an immense amount of literature about it. I think the consensus of opinion in the literature that I have reviewed is that the Quick test for prothrombin deficiency will tell us when and if vitamin K therapy will be effective. We have been trying that in cases of obstructive jaundice and in hemorrhage of the newborn and we think that the observation undoubtedly must be correct.

It is being used certainly in some cases in which it is not indicated and will probably do very little if any good. This test can be made pretty readily, and in these bleeding cases I think it is well worth while as a control. I just wanted to emphasize that when the prothrombin deficiency is found, we do have a very powerful remedy and it will be helpful in such cases.

**A. D. Willmoth, Louisville:** The question of uterine bleeding immediately brings up the whole problem of cancer. If we can succeed in educating the public, here is where the health officer that Dr. McCormack referred to a few

moments ago, can render a valuable service, by instructing the women that everything that happens to them, including getting run over by a Model T Ford after they are a certain age, is not due to their age. There is always the friend in the neighborhood who is willing to tell the woman that the bleeding she is having and the discharge that she is having is nothing to be concerned about, that it is entirely due to her age, and if and when we are able to instruct the public or to get the public to understand that the bleeding in any woman after, we will say, twenty-five years of age is not due to her age, and if we can rule out the problem of endocrine imbalance and recognize that that is a case at least for study, we will make progress.

Many young women succumb to cancer long before the age that we were at one time led to think of as the cancer age, and the younger the woman, the more malignant the growth. I am sure everyone in this room sees what I see in my office, a woman comes in with a bloody discharge and with a uterus that is far beyond the hope of recall either with radium, x-ray, surgery, or anything else; she has gone for many, many months with the advice from her neighbors that there is nothing to be concerned about, and you find a far advanced cancer with a frozen pelvis, for which nothing can be done, except temporary relief. The question, after all, of uterine bleeding resolves itself to the problem of the doctor examining the patient. Many cases go with a simple douche or a simple prescription of whatever you may give, it doesn't make any difference whether it is stypticine or one thing or another. The question is that the patient should be examined and the source of the bleeding determined.

If it is an endocrine imbalance, the metabolism of this patient should be taken, blood chemistry done, the test for syphilis, if necessary, to be sure that you are not overlooking a condition of systemic control that is influencing the patient. Let me plead with you, please to examine the women who come into your office. They say to you that women won't submit. Well, I don't know, perhaps they come into my office with a different turn of mind, but I don't have any trouble getting women to submit to examination. If they don't want to be examined, then I don't want to treat them, and I am not going to treat them. I am not going to prescribe for a bloody discharge from the female genitalia that I don't know anything about. When you tell them that, they will submit to examination. But please examine your patients. Follow the pleadings of the American Society for the Control of Cancer to examine your patients. Don't treat them for months and months and months with discharge, telling the woman that when she quits bleeding you will

examine her. When she quits bleeding she doesn't need an examination.

**Wallace Frank**, Louisville: There is only one phase of the paper to which I wish to speak, and that is the question of malignancy. I do agree with what the last speaker said about examining women, but I do not think that anyone could say that the men in this audience do not make examinations. The men who go to the medical meetings are the men who do the examining, and the men to whom he should have directed his talk are the fellows who stayed at home.

The time has come when, with the teachings of the American Woman's Field Army for the Control of Cancer, women are going to demand examination. They have been taught not only in Louisville, but throughout the state, that if a doctor doesn't examine them they should go to another doctor. With this, I agree.

One word about an examination. I agree with Dr. Henry that the Schiller test and the colposcope mean very little. The Schiller test simply shows you that you have an area of leukoplakia. One can't say definitely whether it is cancer or whether it isn't until a specimen is subjected to microscopic examination. Furthermore, in this day and time all medical students are taught to examine with gloves. I don't think it is humanly possible to diagnose by palpation with the gloved hand an early carcinoma of the cervix. I believe it is impossible. In the first place, you lose the granular sensation that the cervix has in early carcinoma when you put on gloves. Such sensation is perfectly evident to the bare fingers.

Another thing I would urge is that in all cases of bleeding in women at or beyond the menopause, where there is no evidence of anything in the cervix, the patient should be advised and urged to have a curettage. Frequently cancer of the cervix begins at the junction of the cervix and body of the uterus, at the internal os. These cases bleed. You can see nothing, you can feel nothing, and if you don't curette you are going to miss the diagnosis until that individual has reached such a stage in her disease that the hope of permanent cure is eliminated. Also you are going to overlook those cases of carcinoma that arise in the body of the uterus itself. By curettage and microscopic examination of the removed scrapings, a diagnosis can be made, proper treatment can be begun early, and the mortality of the disease reduced materially.

**M. J. Henry**, (in closing): What Dr. Strickler has called attention to is certainly well known to practically all of us and is especially utilized, I think, in the present-day treatment of cancer of the breast in which many men are advocating now the bringing about of the



menopause in those women in whom carcinoma of the breast occurs prior to the menopause.

One of two points I brought out in my paper I should like to emphasize. First is the use of thyroid. Even in people who have normal metabolic rates, I have more than once found bleeding that I could not control otherwise would immediately respond to the use of as much as one grain of desiccated thyroid daily. Why I guess someone else will have to figure out, but it does.

In regard to vitamin K, of course the Quick test is one that I think some day our laboratory men will thoroughly understand and estimate the prothrombin time for us, but when you have a person who is bleeding and you know that the administration of some vitamin K product will bring about an improvement, you cannot wait for an indeterminate estimation of the prothrombin. The use of this newer vitamin K which is now marketed under the name of thyloquinine is encouraging. We have had some of the drug for experimental purposes for over a year. I used it in only one case of bleeding which probably would have stopped had it not been used, but suffice it to say that the bleeding stopped almost immediately upon the administration of the drug. It is wonderful in the control of hemorrhage, and is certainly the most potent vitamin K product that we have ever come across.

#### INDICATIONS FOR AND CHOICE OF OPERATION IN PEPTIC ULCER

FRED W. RANKIN, M. D.

AND

COLEMAN C. JOHNSTON, M. D.

Lexington

During the past quarter century the ever increasing importance of the problem of peptic ulcer has manifested itself in a voluminous literature on the subject. More than a thousand articles a year were published during 1934, 1935 and 1936. These prolific writings from the pens of many authors have explored the field from every angle and, yet in even a cursory survey of the subject one is struck with the vast diversity of opinion in regard to etiology, pathological physiology of, and therapy for peptic ulcer which prevails among those who have devoted much of their time and thought to the subject.

With regard to diversity of opinion held by prominent men in the fields of medicine and surgery, perhaps the most striking example is the recent views expressed concerning the care of patients suffering from massive hemorrhage of ulcer origin. Fin-

sterer, since 1914, and later Gordon, Taylor, Allen, and others are ardent advocates of early surgical intervention, while equally authoritative sources are firm in their conviction that conservatism in the face of massive bleeding is best followed by interval operation. The majority of internists, on the other hand, champion the traditional stand of "masterly inactivity" which may best be summarized in the following three words, sedation, starvation, and procrastination. Those in opposition to this school of thought have for want of better, followed the dictates of Meulengracht and his "harvest hand" diet.

The etiology of peptic ulcer is again a source of much controversy because of the multiplicity of factors which exert their influence upon those who suffer from the disease. The subject has been extensively studied by Ochsner, Gage, and Hosoi, and capably summarized by DeBakey. To express it briefly, these influences have been classified as the predisposing or uncontrollable and precipitating or controllable factors. The former refers to the constitutional make up and the inherent tissue susceptibility to ulcer formation, while the latter includes the effect of mechanical trauma, chemical irritation, nutritional deficiency, and infection.

One may exhaust our limited time in an effort to enumerate controversial points of major and minor importance in this intricate but interesting problem not the least of which is the topic under discussion, that is, radical versus conservative surgery in the treatment of peptic ulcer.

From the melee of fact and fancy accumulated through years of clinical experience and experimental research two outstanding principles have emerged upon which there is at long last unanimous accord.

First, that peptic ulcer is primarily a medical responsibility; and second, that surgery is indicated only in the face of complications which occur during the course of the disease. To list these indications briefly they are: (1) perforation, (2) penetration, (3) obstruction, (4) intractability to medical care, (5) recurrent bleeding, and (6) the possibility of malignant change in gastric ulcer.

The vast strides which have been made in the progress of medical management during the past fifteen or twenty years have completely revolutionized the whole sphere of treatment. The surgical point of view has been entirely changed and, although medical management is as yet far from ideal, many more cases are being sat-

isfactorily controlled in this manner than ever before while fewer and fewer patients are submitting themselves to better and better surgeons with worse and worse results. Paradoxical as this may sound it is none the less true, because we are at this point in the midst of transition from the traditional conservative surgery of yesterday to the radical extirpation of the present decade. Having now established definite indication for surgical intervention in treatment of peptic ulcer let us look back on the problem of the surgeon of twenty-five to thirty years ago. The scope and efficiency of medical management had not as yet proved its worth. The results of non-operative care did not seem to justify its rigid pursuance and, therefore, the surgeon bore the brunt of these failures, which it may be repeated have through the years been steadily decreasing in number. In short, many an ulcer was then sacrificed on the altar of surgery which would now pay tribute at the shrine of the internist.

The surgeon, shall we say, imposed upon at that time, courageously sought the safest way out and in so doing gave birth to innumerable pyloroplastic procedures, gastroenterostomy, and many other operations which now fall into the category of conservative surgery. During that period a far greater number of patients were subjected to operation for minimal lesions with the result that the incidence of complicated cases appeared to be extraordinarily low, and the admirable results of conservative surgery of that era were unfortunately attributed to surgery itself, instead of to what we now feel was responsible. That is minimal surgical trauma, accompanied by a reasonable period of bed rest, complete mental and physical readjustment, the establishment of a routine and carefully regulated postoperative diet, all of which is now being advocated by the competent internist who has furthermore eliminated the incidental mortality of the casual operator. By the same token those cases which then came under the heading of "poor surgical results," it would seem probable now fall into that group in which this competent internist would seek surgical consultation. Granted the logic of this thesis, and few surgeons will deny there is good grounds for its support, in retrospect it would seem obvious that conservative surgery has failed to justify its continuance except, of course, under certain circumstances which will be discussed subsequently.

In the ulcer syndrome there is a definite

gradient of intensity which manifests itself in the type, extent, and location of the pathological process. Just why one individual may suffer from an acute rapidly perforating gastric ulcer, while another for years is destined to harbor a mildly symptomatic chronic cicatrizing duodenal lesion still remains a matter of conjecture. This gradient of intensity somewhat comparable to the grade of malignant disease is favorably influenced by age, although this is not a constant finding, for not infrequently perforation of a hitherto unsuspected ulcer is observed among those in the autumn of life. Generally speaking, however, the younger, highly sensitive and extremely intense individual subjected to the incessant drive of competitive activity is the patient most apt to respond poorly to good medical management, to develop complications, and finally to have a postoperative recurrence if radical surgical extirpation has not been the procedure of choice, in contrast to those seasoned to life's conflict, less sensitive to its adversities and physiologically retarded by advancing age.

Further evidence in support of this conception of a gradient of intensity is the high incidence of multiple ulceration associated with perforation as reported by Kelly to reach 30 per cent in European clinics. Again Puhl, Kongetzney, and others observed a hemorrhagic gastritis as almost a 100 per cent accompaniment of duodenal ulcer found at operation in Germany, Hungary and Austria, while in this country it is only occasionally encountered. This may in part be due to what Von Haberer, and more recently Schittenhelm have spoken of as the geomedical variation in type of lesions as effected by climate, race, and environment.

The earliest supporters of radical surgery for peptic ulcer have been the continental surgeons, leaders among whom were, Finsterer, Polya, Haberer, Schmeiden, and others, and as has been suggested the more intensive disease of the continent in contrast to the United States has been the parent of a more radical surgical trend. For this reason, conservatism is being abandoned more reluctantly here than in Europe.

Perhaps a more studious evaluation of this gradient of intensity in the pathological physiology of the ulcer syndrome would lead to the development of an index upon which might be predicted the extent of the surgical procedure to be used.

In defense of conservative surgery, Luff



reported in a study of 744 cases of duodenal ulcer collected throughout the British Empire that had been treated by posterior gastroenterostomy in which he found a 2.8 per cent incidence of jejunal ulcer and mortality of 5 per cent. Many feel the mortality incident to radical extirpation does not justify the complete abandonment of conservative surgery, and Westermann and some others continue to champion posterior gastroenterostomy as the operation of choice in the treatment of duodenal ulcer.

Much of the work upon which these opinions are based, was done during the era previously discussed, and includes that group of patients which, in retrospect it would now seem best to have treated medically. The apparently good results of posterior gastroenterostomy with its low mortality, lead to its popularization by several surgeons of international reputation and the simplicity of this procedure further increased its popularity. Even the hernia surgeon could gastroenterostomize with ease and too often the indications were simply a peptic ulcer and a patient's remission.

A more critical review of the results of gastroenterostomy as used in the treatment of ulcers now being subjected to surgery is of enlightening interest. Church and Hinton, for example, studied 106 patients suffering from duodenal ulcer treated by gastroenterostomy in whom 18.8 per cent developed gastro-jejunal ulcer as proven by x-ray, while 5.6 per cent more had recurrence of symptoms and suggestive x-ray evidence of ulceration. Only 53.7 per cent of these 106 patients were improved.

Lewisohn reported the incidence of marginal ulcer following posterior gastroenterostomy as 18 per cent, while another 16 per cent of his series continued to have clinical and roentgenological evidence of postoperative recurrence.

In the August 1937 issue of the *Annals of Surgery*, Newburger writes "of 31 gastroenterostomies performed for benign lesions, 48.3 per cent (12.9 per cent operatively proven, 16 per cent clinically and roentgenologically proven, 9.7 per cent clinically positive, and 9.7 per cent clinically suspected) developed jejunal ulcer." Many other writers have cited an incidence of well beyond 10 per cent, but none to exceed the figures of Newburger. As a comparative evaluation of statistical data is impossible an accurate figure cannot be reached, but it is certain that incidence of marginal ulcer following posterior gastroenterostomy,

is inordinately high.

In addition to this it must be emphasized that secondary procedures for the correction of post-gastroenterostomy disease are technically very difficult. Finsterer in computing his mortality for radical operation following complications of gastroenterostomy found it to be 8.1 per cent which is an enviable figure.

There are, however, two indications for gastroenterostomy, first the obstructing anterior wall ulcer in a patient over 50 years of age with a low gastric acidity, and second, when no other operation can be done because of local or systemic conditions.

A great variety of pyloroplastic procedures have likewise been devised for use in the treatment of peptic ulcer. The rationale upon which they are based revolves about the principles of alkalization through adequate duodenal regurgitation. In short, the relief of obstruction, the eradication of pylorospasm, and the fashioning of an opening adequate to permit of a proper gastro-duodenal exchange. The procedure may or may not be accompanied by excision of the ulcer.

These operative maneuvers like gastroenterostomy are rarely difficult. They are associated with a low mortality and have proven helpful in many instances. Their popularity is based on just as unsound a scientific background as is that of gastroenterostomy.

Gastroduodenostomy is in much the same category. It has been devised to by-pass the large obstructing inflammatory process so often found with posterior duodenal wall ulcer.

None of these conservative procedures propose to decrease the area of acid secreting mucosa, nor do they tend to eliminate the secretogogic effect of the prepyloric mucosa when exposed to alkaline duodenal content. In short, two basic principles in the rational treatment are entirely ignored for it is generally believed that the acid gastric secretion originates from the parietal cells of the mucosa of the fundus of the stomach and that the pars pylorica exerts a definite secretogogic stimulus to the acid secreting mucosa when bathed by the alkaline duodenal regurgitant. In order to effect a physiologic alteration of sufficient moment to reduce or abolish the acidity factor certainly one or both of these elements had best be eliminated.

Some of the disadvantages of conservative surgery must be mentioned. As for ex-

ample, in gastric ulcer the possibility of malignant change is a constant threat and resection is, therefore, advisable. Of the duodenal ulcers subjected to surgery, Hinton and Maier reported a representative group of 57 cases in which the diagnosis was established at operation. 11.7 per cent were situated on the anterior wall alone, while 15.5 per cent had ulcer on both the anterior and posterior wall. The remaining 72.8 per cent were situated on the posterior duodenal wall. In short, 11.7 per cent of the group might well have been controlled by conservative surgery, although the remaining 88.3 per cent would have received little or no benefit.

It is the ulcers on the posterior wall which are responsible for the persistent boring pain usually radiating through to the back. This pain is evidence of the progressive penetration of the ulcerative process on the head of the pancreas with peripancreatic infection, or perforation into the lesser peritoneal cavity. Massive hemorrhage, biliary, and commonly duodenal obstruction are also complicating sequela of posterior wall ulcers. Often the inflammatory reaction about these lesions may lead to the formation of a mass the size of a small orange. They present a formidable appearance on exploration, but interestingly enough the greater the inflammatory reaction about these lesions, the easier the ulcer is to resect, because dissection is facilitated by a more clearly demonstrable line of cleavage and the scarring incident to fibrosis from chronic inflammation causes a marked decrease in the vascularity of the involved structure. This is an important point in support of the radical extirpation of these lesions.

In discussing the advantages of radical surgery in the treatment of peptic ulcer one must evaluate the technical difficulties of the procedure, the operative mortality, and the end-results in contrast to these factors associated with the more conservative plan of surgical management. About 20 years ago Finsterer visited the United States, and through his instigation American surgeons began to use more radical measures in the treatment of peptic ulcer. At first criticism was based on the unjustifiable mortality incident to so extensive a procedure, but when it is observed that men such as Bohmansson, Demel, Abramzant, and others have reported several large series of cases with a mortality of 3. per cent, Koenneck reported 468 cases, with a mortality of 1.5 per cent, and Haber-

er has performed 100 consecutive cases without a death,—such criticism does not hold. Several years ago Lahey became convinced of the efficacy of subtotal gastrectomy and, with experience, has been able to greatly reduce his original mortality of 18 per cent to the point where for the last 51 consecutive cases there has not been a death.

The foundation of radical gastric surgery first successfully effected by the famous Parisian surgeon, Peau in 1874, was envisioned by D. C. Th. Merrem, of Philadelphia, who in 1810, through the media of animal experimentation resected the pylorus in dogs and rabbits. Endeavors were then directed against the ravages of malignant disease and since that time innumerable procedures have been devised for more radical extirpation. Many of these operations have become part of the armamentarium of the well trained surgeon in his effort to control the increasingly important problem of peptic ulceration. The Billroth operations for example gained widespread popularity at first, but more recently have somewhat declined in favor with the increasing trend of more radical extirpation. In the first operation the duodenal stump is often scarred or edematous resulting in poor surgical material for anastomosis. If this be the case, only a small portion of the stomach may be resected in order that the anastomosis may be effected without permitting too much tension on the upper part of the anastomosis which has been cryptically spoken of as the fatal angle. Even if a generous portion of the duodenum is available only little more than the pars pylorica of the stomach may be resected for the same reason.

In the second of the Billroth operations the situation is somewhat similar because sufficient stomach must remain to permit of fashioning a gastroenterostomy as well as inverting the gastric stump.

The operation of resection for occlusion is a procedure advocated by Finsterer in the presence of extensive prepyloric or duodenal ulceration in poor risk patients upon whom resection is inadvisable. The stomach is divided well above the lesion and the distal stump closed while gastrointestinal continuity is reestablished by means of a gastro-jejunal anastomosis.

Gridley found that following a very similar procedure used in dogs, gastric secretion is increased in quantity and acidity over a prolonged period of time in contrast to the normal stomach or in those animals in



which the pars pylorica has been resected. The significance of the secretogogic effect of the pars pylorica is evident and certainly this has been borne out clinically as shown by an incidence of 15 per cent jejunal ulcers following the Finsterer procedure.

The Richel-Polya operation permits of a more radical extirpation of the fundus of the stomach as well as the pars pylorica, and although it has been criticised because of the length of the anastomosis with greater possibility of leakage and a too rapid emptying of the stomach perhaps neither of these objections need be taken too seriously. If carefully made, the longer anastomosis will be little more likely to leak than will the shorter one. The disadvantage of too rapid emptying of the stomach may be satisfactorily controlled by smaller feedings at more frequent intervals.

The Hofmeister operation is considered by many to more nearly approach the ideal and certainly it is a useful procedure which permits of a very extensive resection of the stomach. Many operations varying from partial fundusectomy to resection of practically all but the lesser curvature of the stomach have been devised, the details of which need hardly be discussed. Wangenstein has effected the most radical of this type of resection in 9 patients with good results, and he observed that most of them had no Free Hydrochloric acid on a fasting stomach or after an alcohol meal.

The entero-enterostomy and the Roux type or Y shaped entero-anastomosis supposedly devised to prevent obstruction have not only proven useless because obstruction does not occur, but actually predispose to marginal ulceration, because they prevent duodenal regurgitation and neutralization of the gastric content as it passes over the anastomosis. The question of anterior or posterior anastomosis is still a matter of controversy, although most feel that one is equally as good as the other.

The aim of the surgical treatment of peptic ulcer is to rehabilitate with minimal risk the greatest number of patients who fail to respond to adequate medical care. The principles by which this end may be attained are based upon the alteration of gastro-duodenal physiology preferably with removal of the lesion, in such a manner as to relieve symptoms, to treat complications, and to prevent recurrence. In order to accomplish this it is being found that in the

hands of those seasoned by experience and versed in the art of stomach surgery, the most satisfactory results are being obtained by the more radical types of operative procedure.

In a recent series of patients suffering from peptic ulcer seen in my private practice, I have performed 84 operations on 81 individuals using six different procedures. The group ranged from pyloroplastic through gastroenterostomy with or without excision of the ulcer on up to the Billroth 11, Polya, and the more extensive resection and reconstructive procedures necessary in gastrojejunal ulcer or gastrojejuno-colic fistula. In the 84 operations, there were three deaths, an operative mortality of 3.57 per cent. One patient died of a pulmonary embolism two weeks after closure of a perforation. Death occurred the night before discharge from the hospital after what was apparently an uneventful postoperative course. The second patient died of pneumonia following an extensive operation for a choledochoduodenal fistula, while the third failed to survive an intraperitoneal infection following a Polya resection.

TABLE 1  
OPERATIVE PROCEDURES PERFORMED ON 81 PATIENTS

Posterior Gastroenterostomy	42
Closure of perforation	4
Judd Pyloroplastic	11
Polya	16
Billroth 11	2
Resection for jejunal ulcer	7
Excision jejunal ulcer and pyloroplasty	2
	84
Deaths	3
Operative mortality	3.54

In this series of 81 patients, 66 suffered from duodenal lesions, while in 7, the ulcer was located in the stomach. Nine patients presented themselves with gastrojejunal ulcers which had followed previous conservative surgical intervention. Of the 66 duodenal ulcers, 33 were located on the anterior wall, while 32 were situated on the posterior wall. Only one patient had an ulcer on the anterior and also on the posterior wall. In 2 patients, the site of the ulcer was not recorded.

TABLE 2  
LOCATION OF ULCER

Duodenal ulcer	66
anterior wall	33
posterior wall	32
anterior and posterior wall	1
Gastric	7
Marginal ulcer	9
	82
Location not specified	2
Operations	84

Of the lot 4 patients were operated for perforation, 4 more had undergone previous operation for perforation, one of which developed a gastrojejunal ulcer following posterior gastroenterostomy done at a later date. This was one of 9 marginal ulcers in the series, one of whom had a gastrojejuno-colic fistula. Another patient following posterior gastroenterostomy developed a choledochoduodenal fistula. Altogether 14 patients had undergone one or more operations prior to the last procedure for which they were admitted to my service. Twenty operations were performed upon these 14 patients with unsatisfactory results. In short, 17.2% of this series consists of patients suffering from postoperative recurrence of peptic ulcer most of which as shown in table 3 have followed initial conservative surgery.

TABLE 3

OPERATIVE PROCEDURES PRIOR TO ADMISSION	
Number patients	14
Closure of perforation	4
Posterior gastro-enterostomy	8
Pyloroplasty	1
Number operations	20
Excision ulcer	4
Billroth 11	1
Excision jejunal ulcer	1
Operations Unknown	1

The time of postoperative follow-up has been too short for an accurate evaluation of the procedures, but there are 4 patients in this group living in my own community upon whom I did a gastroenterostomy for obstructing duodenal ulcer. Three of these I have operated upon since for marginal ulcers, and the fourth may join them soon for the same reason. Two of these patients

are colleagues in the medical profession and the other two I see at all too frequent intervals as a gentle reminder of the inadequacy of gastroenterostomy. Of the 42 gastroenterostomies performed here is nearly a 10 per cent incidence of postoperative trouble which has already appeared so that it seems more than likely time will uncover a good many more unhappy sufferers of post-gastroenterostomy disease.

#### SUMMARY

First; It has been observed that the volume of recent literature on the subject of peptic ulcer bespeaks an intense interest in a problem of ever increasing importance, and it also suggests that many questions as yet remain unsolved; (2) the many and varied elements which influence the development and progress of peptic ulceration have been mentioned with regard to etiology; (3) the great diversity of opinion regarding nearly every phase of the subject has been emphasized, although it is agreed that the problem of peptic ulcer is primarily a medical responsibility and that surgical intervention is justified only in the face of complications which may be listed as follows: (a) perforation, (b) penetration, (c) obstruction, (d) intractability to medical care, (e) recurrent bleeding, and (f) the possibility of malignant change in gastric ulcer, (4) it is felt that conservative surgery gained a sense of false security because of the good results obtained in those individuals who at this time could easily be controlled medically, (5) the gradient of intensity in peptic ulcer is discussed and its use as a guide to the extent of the surgical procedure is suggested, (6) many of the recent results of conservative surgery were contrasted with older figures showing the reason for the more radical trend, (7) a series of 81 patients upon whom 84 operations were performed is surveyed. Of this group 17.2 per cent presented themselves with postoperative recurrence of peptic ulcer following conservative surgery, (8) the follow-up in the group has been too short to reach accurate conclusions, but already nearly 10 per cent of the 42 patients treated by posterior gastroenterostomy have had evidence of recurrent peptic disease, (9) the physiologic principles upon which are established the concepts of radical gastric surgery have been described and data has been presented to show that radical surgery, when possible, is the only justifiable form of treatment.



## DISCUSSION

**Wallace Frank, Louisville:** I am in practically complete agreement with what Dr. Rankin has said. There are definite indications for surgery which he has outlined. The first is obstruction, then recurring hemorrhage, the fact that the individual does not respond to medical treatment, or, as Deaver used to put it, after he has had six or seven complete medical cures. I think then that individual is a fit subject for the surgical attack of this problem.

I do think as far as the technical maneuver is concerned, it should vary with the location of the ulcer. I don't like the name "peptic ulcer." "Peptic ulcer" covers rather a great deal of ground and doesn't mean anything very definite. It may mean an ulcer of the duodenum, it may mean an ulcer in the pyloric end of the stomach, yet we know the continued history of these two ulcers is somewhat different. Very rarely does carcinoma develop in a duodenal ulcer, one might say practically never. I don't think the same thing can be said of ulcer on the gastric side, and therefore, I think that the types of operation we employ must vary a little depending upon the location of the ulcer.

In his closing remarks Dr. Rankin made the statement that we should try to fit the type of surgery employed to the individual, and I think that holds true not only in ulcer, but in every surgical lesion. There are certain technical difficulties that may arise where, as he has said, we must abandon the planned procedure and do what is next best for the patient.

One must bear in mind the fact that there are a great many men doing surgery who are not experienced gastric surgeons, and I think we should add to what he has already said, that it might be also well for the surgeon to employ that type of procedure with which he is most familiar and which he can best do. If all the cases were operated in the bigger clinics or by men with a great deal of experience in this type of surgery, I would say that resection by all means is the treatment of choice and is my preference. However, there are a great number of surgeons scattered all over this country, who are not capable of doing resections, yet the patient has to be operated, and I think in those cases we might fit the operation not only to the patient, but to the surgeon.

**Irvin Abell, Jr., Louisville:** As I was listening to Dr. Rankin's delightfully instructive paper, it occurred to me that the views he expressed and those we hold are identical; and that consequently there is little left for me to do other than to amplify some particular phase of this problem. Dr. Rankin emphasized the fact that today the trend in surgery is from the con-

servative toward the radical. The radical form of handling peptic ulcers is represented by the subtotal gastric resection, and I think it might perhaps be of interest if I were to recount the use being made of this procedure. In so doing, it is but natural that our views should permeate the discussion.

Dr. Rankin stated that ten years ago surgeons were performing quite regularly gastroenterostomies and pyloroplasties. While a certain number of satisfactory cures resulted, many patients returned both with their original symptoms and with recurrence of their ulcers. In search of a solution to this problem first the pylorus was removed, next the pylorus and antrum, and then the distal half of the stomach. Finally, the subtotal gastric resection, which includes from one-half to two-thirds of stomach, was evolved and accepted as most satisfactorily meeting the following four requirements: (1) removal of the ulcer; (2) removal of that portion of the stomach in which ulcers usually develop; (3) removal of the hydrochloric acid producing portion of the stomach; and (4) permitting the remaining portion of the stomach to resume its normal physiological activity.

The prime indication for surgery in gastric ulcers is intractability. For utilizing the radical procedure in attacking chronic lesions which refuse to improve under a satisfactory medical regime there are two persuasive, potent reasons: (1) experience has shown that following simpler procedures many individuals return with recurrences and unsatisfactory results; and (2) experience also has established the fact that stubborn gastric ulcers undergo malignant changes, the transition in its early stages being capable of detection not by the clinician, not by the roentgenologist, but only by the pathologist. Realizing that in a few instances simpler procedures are indicated, we are using a subtotal gastric resection in these chronic, intractable lesions unless there is some contraindication to its employment.

In a similar fashion we are attacking the chronic, unmanageable duodenal ulcer, feeling that a wide resection which meets the four requirements already enumerated offers to the patient a more rational barrier against the future formation of new ulcers. This view is not universally accepted. There are sections of this country where the simpler procedures are heartily advocated and extensively employed, and figures published from such localities appear to justify the claims made. In other sections, such as Rochester and Boston, the radical procedure is routinely employed unless some urgent contraindication is present.

As regards bleeding ulcers we have during the past four years not had to operate upon any patient whose hemorrhage could not be con-

trolled. Those undergoing surgery because of this indication have done so under elective circumstances when the radical procedure has been employed.

Insofar as perforation is concerned, we are entirely in accord with the views expressed by Dr. Rankin and handle our cases in the same fashion.

The mortality ranging from two per cent upwards is influenced by many factors. It has been clearly pointed out that a direct proportional relationship exists between this mortality and the surgeon's ability, judgment, experience, and the aid rendered him by assistants and anesthetists. The risk involved does not divert us in the situations discussed from using the radical operation: in fact, unless there is some reason for employing another, we regard it as the procedure of choice. Should a contraindication be present, we at no time hesitate to employ that procedure which seems best suited to the intra-abdominal pathological lesion.

**J. Garland Sherrill**, Louisville: This body has heard a most remarkable discussion on this subject. I believe it will withstand opposition by other men for a century. It solves practically, to my mind, the entire topic of the indications for treatment in these conditions.

I am right proud of that boy. He is a tarheel. We have a way of talking out in meeting, but I want to say I have never heard expressed in better language or more concisely or more succinctly what a man wanted to say than he has said it this morning. (Applause) Moreover, I wish to say that wherever a man does abdominal surgery, he should be equipped to do any kind of abdominal surgery. If a man gets in trouble in the belly he is in a bad fix if he doesn't know how to take care of it.

There is a trend in this country — it may be too marked—toward perfecting surgeons who are capable of handling all types of work done in the abdomen. There are a few surgical cases in this particular region that will require care in the selection of the particular method and it may be we will have to do a gastroenterostomy sometimes when we don't want to do it, because we are unable to do a complete and radical operation, but the thing you want to do in this kind of case is to cure your patient, and to do it with as little trauma as possible. But I wish to advise that no man should attempt to do gastric surgery in a bleeding ulcer unless he fears not hemorrhage. I like to go back to what Cartledge said in those days of early surgery when the combat was heavy and hard among the doctors in the discussion rooms. Cartledge said, "Look the bleeding vessel in the face. Get down to it, tie it off, and go on with your procedure." I wish only to add that one thing to what Dr. Rankin has said, and

to emphasize what both he has said and Dr. Frank has said and what Dr. Abell has said on this subject, and that practically closes the equation.

**Fred W. Rankin**, (in closing): I thank you very much for your generous discussion and for your kind attention. I must say that this is a new experience for me to have everybody agree so unanimously with what I have said.

## THE RELATIVE VALUE OF INSULINS IN THE TREATMENT OF DIABETES

C. C. TURNER, M. D.

Glasgow

The ideal therapy is that which most nearly approximates the normal physiological changes. Therefore in the treatment of diabetes mellitus rational therapy has for its purpose the control of glycosuria and the prevention of wide fluctuations of blood sugar.

It is assumed that in the normal individual the need for insulin is the stimulus for its secretion. Just as the odor of food stimulates the salivary glands to activity, so the increase of the blood sugar content starts the flow of insulin. As the flow of saliva is continuous just so the flow of insulin is continuous, fluctuating to meet the needs of metabolism. Any artificial substitute for this method is only a substitute and cannot be entirely satisfactory. I often illustrate it to my patients this way; suppose your family requires two gallons of milk a day, and your cow affords only one gallon, what would you do? Buy one gallon, of course. But the case of the diabetic is not so simple as that. The regular commercial insulin exerts its maximum activity for from fifteen minutes to one hour and its activity ends anywhere from three to six hours.

There are two kinds of insulin, the quick acting and the slow acting. Of the quick acting there are two products now in use. The old insulin (the amorphous or unmodified) the kind that Banting and Best produced back in 1921 and the crystalline insulin released for use in August 1938 under the name "Insulin specially prepared as a solution of zinc insulin crystals." At first it was thought that this type was slow acting but according to the experiments of Marble et al, a report of which was published in the *Journal of the A. M. A.* September 30, 1939 it too is a quick act-



ing, slightly superior to the old regular insulin. Joslin states that crystalline insulin stands to regular insulin as crystallized white sugar does to brown sugar. Authorities now recommend the transfer of all patients from regular to crystalline and the discontinuance of the regular amorphous insulin altogether. This seems to be a good idea since too many insulins are confusing. Therefore, in this article only two insulins will be considered. The crystalline or quick acting and the zinc protamine or slow acting.

Diabetes was treated with regular insulin for about fifteen years, from 1922 to 1937; it was such a marvelous discovery that during the first eight or ten years of its use no one offered any criticism of it. Before its discovery the mortality of diabetes in children and adolescents and young adults was almost one hundred percent. The mortality in adults was high and the morbidity even higher. Doctors were slow to criticize such a revolutionary measure. But for the past several years prior to 1936 there was a growing demand for a product that was slower in action and whose activity lasted longer. It was discovered that the blood sugar curve was erratic; that patients frequently went in quick succession from hyperglycemia to hypoglycemia. It was noted too that arteriosclerosis and coronary heart disease among diabetics was on the increase. A search was begun for a new product or some combination with regular insulin that would prolong its activity. Various mixtures were tried, such as insulin and tannic acid insulin and the metallic salts, insulin and oil etc. None proved to be satisfactory.

In 1936 Hagedorn and his co-workers published a report of their work in which they allowed crystalline insulin to react with the protamine of a certain salmon fish roe, a compound was thus formed which is insoluble at the pH of mammalian serum. It was suspended in an aqueous solution and if injected into the subcutaneous tissues formed a reservoir which was slowly acted upon by the tissue fluids and the insulin released slowly over a period of twenty four to thirty six hours or longer. Thus more nearly simulating nature's method. Since that time a great deal of work has been done on this compound. Eventually it was stabilized as protamine zinc insulin. The mixture is stable for at least six months. Protamine zinc is the only protamine insulin combination obtainable today and each package bears an expiration

date. Today it is being used largely but not exclusively in every diabetic clinic in the world. Experiments have pretty well proven its superiority over quick acting insulin on the following points:

The blood sugar is maintained at a more even level avoiding the high peaks and low valleys often seen after the injection of crystalline or quick acting insulin.

A more liberal amount of carbohydrates is allowed.

Fewer injections are required.

Less atrophy of fat at the point of injection.

Fewer reactions.

These are important factors. The steady blood sugar level; this is of a paramount importance for several reasons, the more nearly the diabetic's blood sugar curve approaches the normal the better he feels, the better he resists infection less the danger of diabetic iritis and cataracts and the most important of all is the effect on the diseased pancreas. Since an increase in the blood sugar content stimulates the Islands of Langerhans to activity therefore a constantly high blood sugar content whips them to greater and greater effort allowing no time for rest. In diabetes as well as in any other disease rest of the diseased organ is of first importance. I wish that this point might be emphasized. There are a great many people including quite a number of doctors,—very good doctors too—who feel that complete control of diabetes is entirely unnecessary. That glycosuria of 1 per cent more or less is of no importance. That it just represents so much loss of food and in order to compensate for that all the patient has to do is just eat a little more. The most important factor in the treatment of diabetes is to remember that a diseased pancreas is being treated and that in so far as possible it must be relieved of its work. That it must rest and it cannot rest with a high blood sugar content.

There is another wide spread fallacy among the people for whom I practice, the origin of which I have not the remotest idea, that is that while carbohydrates such as sugar, candy, potatoes and breads are poison to the diabetic yet he may eat all the honey he wishes without any evil effect. Because of these two false conceptions and the fact that a strict routine of self restraint is required, I am of the opinion that, generally speaking, diabetes over a long period of time is the poorest treated of all diseases with which I am familiar. Consequently any improvement in insulin, any

simplification of the routine is more than welcome.

A more liberal carbohydrate diet is something which the diabetic appreciates and which makes the diet more palatable.

Fewer injections required. This is a very important point especially in children, even grown-ups if possible shy away from needle pricks.

Less atrophy of fat at the point of injections. Most informed men say this is true, but I have not personally observed it. I do know, however, that regular insulin is very disfiguring to some patients.

Fewer and milder reactions. I am not prepared to accept that statement in full. My experience has been that while they may be fewer in number yet when they do occur they are more severe. They are not only more severe but they last longer and are more difficult to control. A patient of mine, a doctor, says he doesn't have diabetes any more, only insulin reactions.

I once saw a patient, a farmer, who continued wild and delirious with frequent convulsions for seventy two hours after the administration of forty units of protamine zinc insulin; even after the intravenous injection of twenty cubic centimeters of fifty per cent solution of glucose and long hours after the urine showed four plus sugar and the blood sugar content arose well over two hundred. Following this episode the deltoids and biceps in both the right and left arms were paralyzed and remained so for months. This violent reaction was explained on the grounds that the patient had been stabilized on a given dose in the winter time while in the hospital. After returning home the cumulative effect reduced the blood sugar, no doubt, to lower and lower levels so insidiously that no symptoms of hypoglycemia were noticed. Then came a day of hard toil which reduced the blood sugar deep into the hypoglycemic zone (maybe as low as ten or twenty milligrams although it was not taken); this was followed by the usual dose the next morning and another hard day's work begun with the results above reported.

I admit that this is a most unusual case and that it is no argument against the use of it but it does show the possibilities. Of all the complications incident to the treatment of diabetes, insulin reactions are feared the most. Patients always tell the doctor about the reactions, never about the times they run sugar.

What are the indications for the use of

protamine zinc insulin? They have been given by Doctor Joslin as follows: (1) Newly discovered diabetes. (2) Those with high fasting blood sugars. (3) Those requiring many doses of regular insulin a day. (4) Those who are abnormally sensitive to insulin as manifested by frequent reactions with glycosuria. (5) Patients with heptomegalia. (6) Patients with lipodystrophy. (7) Mild diabetes. (8) Cardiac patients with diabetes. In other words in practically all uncomplicated cases. However, in severe cases it is often necessary to combine protamine zinc insulin with crystalline insulin.

Perhaps its greatest field of usefulness is to be found where it is not used at all. That is in the hundreds of thousands of mild cases of elderly people who are unaware of the presence of the disease or being aware of it, do nothing about it. In such cases a daily dose of five or ten units of protamine zinc insulin would control the disease without the inconvenience of limiting the diet. So much for the slow acting or protamine zinc insulin.

Under what conditions or circumstances is crystalline or quick acting insulin to be preferred? In patients, who have been taking regular insulin for years and are satisfied with it and are getting along all right, they should change to crystalline and be left alone. In all cases of acid poisoning and coma. In all cases of illness in which digestion is disturbed. And in all cases of infection. In surgical procedures. The quick acting insulin is preferred in the above cases for the simple reason that it is quick acting.

#### SUMMARY

At present there are two kinds of insulin in use. They are; the quick acting and the slow acting. Of the quick acting there are two products in use. The old regular, the kind that has been in use so long and the new crystalline which has only been in use for a little more than two years. In the near future the old or regular type will be taken off the market leaving the crystalline to take its place.

The slow acting or protamine zinc insulin is used in practically all new cases of uncomplicated diabetes either alone or in combination with the quick acting insulin. The quick acting is used in emergencies such as coma, infections and surgical procedures and in all other conditions in which the level of the blood sugar is unpredictable.



## DISCUSSION

**John W. Scott, Lexington:** I think protamine insulin is usually the insulin of choice. There are certain pitfalls in its use. These, I think, depend in chief measure on one far-reaching pharmacologic principle: that is that any potent substance is dangerous when it is administered at intervals which are shorter than the period during which the foregoing dose of the drug is still effective in the body. When, for instance, a dose of digitalis is repeated in four hours, some of the previous dose is still present and operating in the body. This cumulative action is produced. Such is the case with protamine insulin; its action is not complete in the first twenty-four hours, and when the patient gets his second dose at the end of twenty-four hours, the blood sugar may not have returned to its previous level. After another twenty-four hours the level may be still lower and so insulin shock often develops after three or four daily doses of the same size and with the same amount of food and the same exercise.

It is important to remember the two factors which lower blood sugar. One of those is insulin, whether produced in the body or supplied from without, and the other is physical activity; physical activity lowers blood sugar. It used to be said of regular insulin that a round of golf was equivalent to five units of insulin. The diabetic who, for instance, was expected to take twenty units of insulin in the evening, if he had a round of golf would take five units less. This expedient fails with protamine insulin, because of its prolonged action and infrequent doses. Therefore, when the patient has taken his dose of protamine insulin and takes additional exercise, which is exactly equivalent to taking an additional dose of insulin, he should protect himself by additional food. An unexpected game of golf or a particularly hard day at business or in practice demands additional food.

The pitfalls of this situation are illustrated by a recent case that we had, of a woman who is a severe diabetic of many years' standing. She had been taking 40 units of protamine insulin in the morning and 40 in the evening and had been spilling sugar, at that, pretty regularly. I had not seen her for some weeks. On a certain day (she had changed her habits of life somewhat, not housekeeping as she had been) a friend sent her a "beautiful" lunch. The friend thought a "beautiful" lunch for a diabetic meant no bread and very little carbohydrate of any kind. Later, she had gotten her evening meal earlier than usual and it, too, happened to be lighter than was customary.

The next morning it was noticed that she was a little groggy, not too groggy, however, to take her usual 40 units of protamine insulin. In a half hour she was in coma. When seen a few minutes later, though comatose, she was in shock, with sweaty skin, not at all the picture of diabetic coma. She had the signs of severe cerebral damage, deep coma, bilateral Babinski and abolition of most of the physiological reflexes. It looked as if she might have had a cerebral thrombosis. She was taken to the hospital. There the urine obtained by catheter showed one plus sugar. "This woman," we thought, "probably has had a cerebral accident, she has sugar in her urine, she can't have hypoglycemia." Fortunately the blood sugar was soon reported at the level of 30 milligrams percent. It was then obvious that she was in hypoglycemic shock, in insulin shock. Then an expedient was used which, I think, saved her life. She was utterly unable to swallow, her reflexes were abolished, she was in deep coma, she even had bilateral Babinski, and her veins were extremely difficult. With the greatest difficulty some glucose was finally got in. Before that was accomplished we had passed a duodenal tube through the nose and had introduced sugar into the stomach. In a few minutes she was quite out of her shock—the most dramatic illustration of a patient at one moment at the very brink of the grave; at the next, recovered.

This, I think, illustrates very well the pitfalls of the use of this agent, and of the ignorance of patients, even those we have been teaching for years and years, as we had this woman. She had a "lovely" lunch sent into her by somebody who knew exactly what a diabetic ought to have, and that was, no carbohydrate. She had her insulin adjusted to a certain amount of food; she failed to get that amount of food, and went into severe shock. One could easily have been misled, particularly if remote from a laboratory and a blood sugar determination, by the fact that there was sugar in the urine. Why did she have sugar in her urine? Because at midnight, we will say, she was putting out perhaps four plus sugar; she had a collection of a considerable amount of that urine in her bladder; the urine she put out after four o'clock, we will say, or five o'clock, probably was sugar-free, but there was enough of this high level of sugar to bring the total to a considerable amount of sugar.

As Dr. Turner has said, the treatment of diabetes isn't nearly as good as it ought to be. With rare exceptions, such as the case just reported, the lack of laboratory aids is not a serious bar to efficient treatment of diabetes. Af-

ter the diagnosis is established, most of the information you need can be gained by examination of the urine. Much more important generally than the clinical laboratory is a knowledge of the values of common foods and the ability to prescribe a diet of certain food values in such terms that the ordinary layman with the ordinary household measures can prepare it.

**J. A. Orr, Paris:** I would just like to call attention to some of the pitfalls in the use of insulin. I have a patient at the present time, who is a very decided neurotic and has been under my care for several years, and there has never been any time that it has been possible to stabilize her dose of insulin. Whenever she gets one of these nervous tantrums or ideas that she has something wrong with her, immediately her whole dosage and her output of sugar goes haywire. I have tried the use of sedatives and to some extent I have seemed to stabilize, in a way, the dosage by the use of hypnotics and nerve sedatives. However, I have never been able to control it entirely.

Another experience that I have had does not seem to be general. I have had two patients who to my mind were allergic to protamine insulin; in spite of the fact that they have a continually high blood sugar or high urinary output of sugar, they have a reaction on being given an administration of protamine insulin. It didn't come on, as you might suppose, with an insulin shock after the insulin had time to be absorbed, but immediately after the administration of the protamine insulin they would have a nervous reaction which was definitely not like an ordinary insulin shock and at the same time would have a high urinary output of sugar.

**W. A. Weldon, Glasgow:** Dr. Turner asked me to discuss his paper. I want it understood that I don't treat diabetes, but I have been Dr. Turner's patient now for about twelve years. I would like to recommend the use of protamine insulin because there has been no way that I could keep myself sugar-free except with the use of protamine insulin. I would like to issue this warning, however; I have never been able to tell when I was going into insulin shock under the protamine insulin, and if you do have an insulin shock it is different from the insulin shock that Dr. Turner spoke of in his paper from the regular insulin, in the fact that if you have a shock and can take one glass of milk with regular insulin, all right, but if it is shock from protamine insulin you have to repeat that, say, in thirty minutes or in an hour. In fact, I would say during a period of three to four hours you had better be careful, because you might have

to take repeated glasses of orange juice or repeated glasses of milk.

I find that I have never been able to get along on strictly protamine insulin. It has been, with me, a combination, and the Doctor spoke about the fact that if you take protamine insulin you had better be careful about your exercise. That is true unless it is figured beforehand that you are going to take an unusual amount of exercise. I recall that I was taking protamine insulin, and I went out to play a round of golf and I think I had a real bad shock, in fact I had to be carried to the hospital. That was the worst shock I had. It wasn't due to the excessive insulin, but due to the fact that I had eaten the same and had gone out and played golf that afternoon and was unable to tell what would happen. Those who played with me said I didn't hit the golf ball well for a few times, but I couldn't attribute that to an insulin shock, because I often did that. I did appreciate Dr. Turner's paper, and I appreciate the fact that I know there are a lot of men in Kentucky who have a thorough knowledge of the treatment of diabetes, but I think Dr. Turner perhaps is treating around 400 cases, and he does understand it thoroughly. In personal appreciation of what he has done for me, I discussed this. I know I have worried him a great many times during the past year about the insulin reaction, but so long as I have the diabetes I will have to take the insulin, and so long as I take the insulin I expect to have reactions. I have gotten used to it and all my friends have gotten used to it and we get along quite well.

**R. N. Holbrook, Louisville:** I, too, would like to express my appreciation of the paper and take one minute to ask a question or two. I understood Dr. Turner to say that it was very important to keep strict control over the diabetic and I presume he meant to keep the blood sugar level down below, we will say, the urinary threshold of perhaps 180. Assuming that is the correct way to treat the disease (and I undertake to do it that way), I find that the patients fear the insulin shock coming upon them in a subtle manner, and I should like to ask you how you recognize this lowering of the blood sugar level. Do you do frequent blood sugar determinations? Do you go by symptoms very largely? After you have the patient established on a weight maintenance diet and everything is going along presumably satisfactorily, how do you know but that your patient is going into this slow insulin shock, or, as you said awhile ago, his glucose tolerance changes while his diet is regulated and while he is taking a fixed amount of insulin? How do you assure yourself that everything is still all right so far as the blood sugar is concerned?



Then one other question: Just where do you try to keep the blood sugar? Dr. Smith, who was to discuss your paper, said to me recently, "Don't worry about the blood sugar or the urinary sugar particularly; as long as your patient is doing well it is all right if he has a one or two plus sugar in the urine." What do you think of that?

**Wallace Frank**, Louisville: In ordinary surgical practice we see numbers of individuals who are diabetics and who at the same time must undergo surgery. Since the introduction of insulin, what was a very serious problem has been greatly simplified. We think nothing of operating them now. What is done is that the patient is given glucose in solution intravenously with enough insulin added to the solution to burn up the sugar that we put in. If the individual has a high blood sugar, additional insulin is put into the solution in order to reduce the blood sugar to a point where diabetic coma is not apt to ensue.

The use of insulin in surgery of the diabetic is most important, and without it we were up against a serious problem, which I think is now solved.

**C. C. Turner**, (In closing): I always take Dr. Weldon with me when I talk on diabetes, as an advertisement but I have to pay off before I get home.

I appreciate the splendid and interesting discussion which my essay provoked. I also wish to thank those who asked questions, and I shall attempt to answer as many as I can in the allotted time.

One of the doctors asked about blood sugar. It is not practical to do a blood sugar every day or every week. We try to get the patients to come to the office once a month, at which time we check up and see that they are trying to stay on their routine. It does require some laboratory facilities, it does require considerable training on the part of the technician, and it requires time. Therefore, it is not practicable for patients to learn to do blood sugar. I think that if the urine stays sugar-free, the patients get along quite well, after they are once on a routine; because in most cases a normal urine sugar indicates a normal blood sugar.

There are a great many factors which enter into hypo and hyperglycemia. If you were dealing with a chemical laboratory, once you got your grams of proteins and carbohydrates and fats all figured out, and then the insulin to cover it, it would be a very simple matter but in the patient there are a great many other factors that enter into it; and I appreciate Dr. Scott's going into that.

In order to impress it on the patient's mind we write on a blackboard in the office the three fundamental principles in the treatment; First,

Diet, that means, of course, limitation of carbohydrates, because diabetes is a disturbance of carbohydrate metabolism. I think probably the limitation of calories is more important than so much fussing about carbohydrates. However, there must be some limitation of the carbohydrates, but after all, you get along pretty well in most cases if you just limit the calories.

The next thing in treatment is exercise, that word is written on the blackboard. Outdoor exercise is just as important as is the matter of diet. The type of exercise should be adopted to suit the patient's needs considering age, sex, occupation etc. First, limitation of diet; second, exercise; and then, if that doesn't set the patient right, he must use insulin.

There isn't any way of knowing, Doctor, about your patient, except at the moment it is taken, whether he is running a high or low blood sugar. The blood sugar is taken first, to establish the kidney threshold and subsequently these frequent or rather infrequent readings are taken to determine if the blood sugar level remains within normal range of the established urinary threshold.

The emotional element has a great deal to do with it, and you will never be able to handle that patient, Dr. Orr, from what I gather, with her nervous, hysterical temperament; you can't do anything about her running a high blood sugar, anymore than you can about her being nervous and hysterical. Emotion, anything that disturbs the patient, is something that might cause her to go into shock.

I am surprised at the statement about Dr. Lyne Smith, if the Doctor quoted him correctly, because he is a good doctor and he treats lots of diabetics. Therefore, I can't understand his saying that urine sugar of one or two percent doesn't matter; because that does not give the pancreas any time to rest whatsoever. It is very important that the patient does not run urine sugar. As I stated in my essay the nearer the diabetic approaches normal the better it is for him. Obviously glycosuria is not a normal condition, if it were, everybody's urine would contain sugar. Since glycosuria practically always is accompanied by a high blood sugar and since high blood sugar throws an extra burden on the insulin secreting glands allowing them no time for rest, it is apparent that glycosuria of any amount makes a lot of difference. In addition to the bad effect it has on the pancreas, it subjects the patient to all the hazards of an untreated case, such as furuncles, carbuncles and infections of various kinds.

Some one asked what effect diabetes has on blood pressure? I don't know that it has any, Doctor, but this may be what you had in

mind; the effect on elderly people with cardiovascular disease. Dr. Hayes, my nephew, had an old gentleman who had been pretty well knocked out with cardiovascular disease and running a lot of sugar for a considerable length of time. We don't try to free his urine entirely because he has a high pressure, his arteries are very hard, and I think that there is some danger in reducing the blood sugar to average normal, it might precipitate a heart condition, such as coronary thrombosis or angina. I think they do better with high blood sugar. Isn't that so, Dr. Scott?

**J. W. Scott:** I think low blood sugar is very disastrous to them.

**C. C. Turner:** That is what I was trying to say. Dr. South mentioned drawing pictures, Dr. H. John of Cleveland has a little primer that is a fine thing for patients. The carbohydrates; sugar, candy, bread, corn, etc. are all painted red to show the patient that it is poison to him, he mustn't have that. We use that book. We get our patients to buy it if he can. There are a lot of other good books, but this is illustrated and I think it is very instructive to the patient.

I disagree with our President, Dr. Bell, about doctors being bad patients. That has not been my experience. Doctors and teachers and other well educated people, as a rule are the best patients. The more the patient knows about the disease the better for him and as a rule the better he cooperates.

## AN EVALUATION OF THE PRESENT STATUS OF MALE HORMONE THERAPY

JAMES ROBERT HENDON, M. D.

Louisville

Endocrinology, as a special field, is one of Medicine's youngest offsprings. It is however, a growing youth whose hormones seem to be functioning at a breath-taking pace. Knowledge of the functions of the glands of internal secretion has been rendered complicated and difficult to attain largely by the fact that all members of the endocrine chain appear to be mutually interdependent and pathological function in one is reflected by abnormal action in another or all members of the group. Nevertheless chemical and biological experimentation is making certain headway closely followed by clinical trial and observation, and sure knowledge seems not so far away.

In view of the fact that cogitations concerning sex have always occupied a large

part of Man's thoughts, it is somewhat surprising that this sphere of his physiological activities is one of the latest to be successfully invaded by medical science. For hundreds of years, since the first days of the harem, men have been familiar with the physical changes induced by castration and as early as the first century A. D. the ingestion of gonads was recommended by Mesue as an aphrodisiac. Continuously after this the testes of many animals were prescribed extensively as aphrodisiacs and for general stimulation. In 1775 Bordeu first advanced the theory of an internal secretory function of the testis and Haller in stating the same theory suggested that a substance secreted by the testis into the blood was responsible for beard and genital growth (1).

Berthold in 1849 first produced comb growth in capons by implantation of testis tissue, and even showed that amputated combs and wattles are regenerated by such transplantation. (2) In 1889 Brown-Sequard injected crude extracts of the testes of dogs and guinea pigs into himself and claimed rejuvenating powers for these extracts although he did admit that suggestion may have been partly responsible for the effects noted. Brown-Sequard's statements met with great popularity and following these the benefits claimed for testis tissue extracts were numerous and varied. Most of these have never been substantiated. Transplantation of the testes in man was first attempted by Hammond and Sutton in 1912 (1).

McGee (3) fractionated and concentrated extracts of bull testis tissue and found the lipin fraction to contain androgenic or sex-stimulating substance in 1937. Funk and Harrow (4) demonstrated an androgenic extract of male urine in 1939. A little later Gallagher and Koch (5) showed that androgens occurring in testis tissue extracts and in urine are different compounds. Those of urinary extraction are much less potent than the testis tissue extract and are now looked on as excretory products of the true male hormone.

In 1931 Butenandt obtained 15 mgm. of pure crystalline androsterone from 25,000 liters of urine, and following this Ruzicka was able to synthesize the substance from cholesterol. Later Laqueur separated testosterone in crystalline form from bull testes and its synthesis from cholesterol was announced by Butenandt and by Ruzicka in 1935 (2).



Much experimental work has been done with androgenic substances since this time and part of this yet awaits confirmation. It is generally accepted, however, that the male hormone which is probably testosterone is secreted by the interstitial or Leydig cells of the testis functioning in symphony with the anterior hypophysis and other endocrine organs, and that its function is the induction and maintenance of the secondary sex characteristics of the human male (6). Included here are libido, growth and erection of the penis, growth and development of the scrotum, growth and distribution of body hair, masculine pitch of voice and correction of castration changes in the pituitary. Less certain is its effect on growth and development of the prostate and in effecting descent of the testes. (1, 2, 6, 7, 8, 9, 10, 11). On the other hand testicular atrophy, prostatic hypertrophy, precocious puberty and temporary suppression of sperm counts have followed its employment. (8, 10, 11, 12). In females inhibition of cyclical endometrial effects and suppression of pituitary gonadotropic activity have been noted (14, 15) but signs of virilism have also attended its use. (29).

Testosterone, used usually in the form of testosterone propionate, has proved to be a most valuable therapeutic adjunct if the limitations of its usefulness are carefully watched. The fact that its hormonal activity plays no direct part in spermatogenesis is too well known to deserve more than passing mention here.

#### HYPOGONADISM

The male sex hormone has been most frequently used in conditions of hypogonadism when the testes fail partially or completely to function. Such a condition may be met in rare congenital absence of the testes, when orchitis follows mumps, in certain cases of pituitary disease, cryptorchidism, and following surgical or traumatic castration. If the testicular function failed before puberty the individual is usually tall with characteristic anthropometric measurements, the distance from the symphysis to the floor being greater than that from the symphysis to the crown of the head and the span exceeding the height. The scrotum is small and the testes, if contained within it, are tiny. The penis also is diminutive and quite flaccid and the prostate is hypoplastic. Pubic and axillary hair are scant, there is little or no beard, and the fine skin, smooth and boyish in the young, becomes greatly wrinkled with age. It has a characteristic yellowish cast. A feminine distribution of

fat is seen at times but is not constant. The voice may be high pitched, and the laryngeal prominence is absent. Epiphyseal union may be delayed. These patients experience but little sexual desire and erections are weak, usually with no ejaculation, or with an ejaculate which contains no sperms. Physiologically or psychologically these abnormalities have a decided effect on the personality of the hypogonad individual. Though not generally effeminate, he is ashamed of his appearance and is shy, non-aggressive, and given to depressed or anxiety states. There may be associated also emotional instability and vasomotor disturbances (1, 6, 16, 17, 18, 19, 20, 21, 22, 23, 24).

The effect of male hormone therapy in these cases is dramatic. Within a few days libido develops and frequent erections occur. There may be ejaculation but spermatogenesis can not be brought about by testosterone. Later effects of therapy are a transition to a more masculine appearance, increased growth of beard and body hair, increase in size of the genitalia and enlargement of the hypoplastic prostate. Erections may be so frequent as to amount almost to a state of priapism but this is not desirable. There is an improved general sense of well-being, the voice becomes lower in pitch and the patient assumes a more masculine and aggressive attitude. Retention of nitrogen and salt leads to gain in weight without obesity. There may be an elevation of a previously low metabolic rate and androgens, absent in the urine before treatment, now appear. What all these changes will mean to a castrate or eunuchoid patient is obvious and needs no comment. It must be pointed out however that treatment of these and other conditions with testosterone is purely substitutional therapy and offers no promise of permanency of results. On discontinuing treatment there is gradual regression of all or nearly all of the changes brought about by its use.

Kenyon (18) has estimated that from 7 to 21 mgm. of testosterone are metabolized and lost in the urine by normal young men daily. This should suggest the amount of hormone necessary in cases of hypogonadism but dosage seems to be dependent on individual requirements. Thus, some individuals have needed as much as 25 mgm. daily while others have experienced priapism with less than half that amount. Our practice is to begin treatment with the moderate dosage of 10 mgm. three times weekly, and after two weeks to adjust this

dosage in accordance with the patient's response. After optimal effect has been achieved the changes may be maintained by smaller amounts. As has been stated testosterone propionate is the compound most frequently used because it is the most potent (30, 31). Dissolved in oil, it is injected intramuscularly, preferably in the buttock. Maintenance of effects by other methods of administration will be discussed later.

Rarely, if ever, should testosterone be administered to prepubertal boys (32, 33, 34). The undesirable induction of precocious puberty and possibly testicular damage will more than offset the very questionable results achieved. Nor should it be injected readily into any young man who complains of impotence. The huge majority of such cases are psychic in origin (6, 23, 35) and should be approached from that viewpoint. Experiments on rats (12, 36) and ground squirrels (6) to the contrary we have no conclusive evidence that testosterone is of any value in male sterility.

#### MALE CLIMACTERIC

In women failure of ovarian function at the menopause leads to excessive production of gonadotropic substances by the hypophysis, and it is believed that the resulting hormonal imbalance is responsible for the manifestations of the menopausal syndrome. At any rate estrogens will inhibit or suppress pituitary gonadotropic production and estrogens will relieve the unhappy symptoms of the menopause. It has been reasonably established that a similar situation may and frequently does exist in the case of men. (7). Normally the production of androgen by the testis very gradually fails after the age of 40 (21). With this failure the output of pituitary gonadotropic hormones increases. Because of the gradual character of these changes, however, most men are ushered through this period with no annoying symptoms. Others are made miserable by what are real difficulties of the male climacteric (21, 27, 37, 38). In addition to lack of libido and loss of potency the following symptoms have been noted: hot flushes, excessive perspiration, dyspnea, numbness and tingling of extremities, tachycardia, emotional instability, irritability, vertigo, insomnia, decreased memory, impairment of concentration, suboccipital tension, feeling of inferiority and depression (27, 38). Werner, Dunn, and others have reported the treatment of such cases with testosterone propionate and have recorded marked success.

The following report is an example of this condition.

Mr. J. H. S., an attorney, aged 50, first consulted me in March 1940. His chief complaints at that time were a continuous feeling of nervous and mental tension, periodic insomnia, hot flushes, night sweats, and emotional instability. These had been present for about eight months and were becoming more severe. He had been impotent for two years but this had caused him no concern. His subjective state and his vasomotor instability had however produced severe depression. A physical examination was essentially negative except for dry skin with little tone, blood pressure of 104-65 and a rather rapid pulse. The prostate was palpably normal. A basal metabolic rate was not obtained, and an estimate of the androgen content of the urine could not be made. It was not considered desirable to stimulate any abnormal sexual activity in this patient but only to relieve him of his annoying symptoms. Ten milligrams of testosterone propionate\* in oil were injected intramuscularly twice weekly. At the end of two weeks there was questionable slight improvement. The same amount was then injected four times weekly. Two weeks later improvement was definite and marked. The vasomotor symptoms had disappeared, he felt calm, relaxed and ready to do a day's work. He had had one or two feeble erections. Sesame oil injections were then given in place of testosterone without the patient's knowledge. In ten days his symptoms had begun to reappear. Testosterone treatment was resumed with gratifying results. After four more weeks of treatment injections were gradually reduced in frequency and finally stopped. For the past month he has been using an ointment representing two milligrams of testosterone per gram which he rubs into his skin nightly. There has been no recurrence of symptoms. His prostate is unchanged to touch and his latest blood pressure reading was 112-70. The use of the ointment will gradually be decreased and, it is hoped, may be discontinued altogether.

Testosterone is not to be administered to elderly men who would like to recall their youth for an evening or two. There have been rumors, if no actual reports, of disastrous consequences following such use.

\*We are indebted to Dr. Max Gilbert of the Schering Corporation for the testosterone, methyl testosterone and testosterone propionate used in the cases reported.



## PROSTATIC HYPERTROPHY

Two theories enjoy popularity today concerning the possible endocrine origin of benign prostatic hyperplasia. One states that two hormones are secreted by the testis: a hormone, probably testosterone, by the interstitial or Leydig cells, and another, called inhibin, by the germinal epithelium. To the age of fifty this second hormone controls, through the anterior pituitary, the production of male hormone. After the age of 50 the production of inhibin fails, the pituitary hypertrophies and hypersecretion of testosterone occurs. According to the theory it is this increased output of testosterone which is responsible for prostatic hyperplasia, and injections of inhibin should prevent or relieve this condition.

The other concept is that the production of male and female sex hormones, which occurs normally in man becomes unbalanced at about the age of fifty. This change is in the direction of a relative preponderance of female over male hormone and this overbalance causes hypertrophy of the prostate. Testosterone should, then, achieve the desired result in this condition.

Both theories have been investigated experimentally but effects noted in lower animals (39) cannot be translated literally into human terms. Moore and McLellan (8) by their studies have lent considerable weight to the second theory. Reports concerning the clinical results with hormone therapy have been quite contradictory (7, 8, 9, 10, 40). Remembering again that any such beneficial results are only temporary I have not attempted hormonal treatment of prostatic hypertrophy.

## IMPOTENCE

The condition of impotence has already been considered briefly. Most of these cases occur in young men as a result of psychic conflict (17, 23, 35) or, if they are organic in origin, will usually present the signs and symptoms of hypogonadism which has been discussed. The use of testosterone in psychogenic impotence has not met with great success. (41) Apparently the effects of the compound are tempered by the physiological need for the hormone and the individual with intact genital organs is not benefited by administration of the hormones (42).

As has been indicated before, grave doubt exists as to the expediency of stimulating sexual function in the impotent senile or pre-senile male. That it can be stimulated there is no doubt, but too little is known concerning possible general conse-

quences to warrant its use freely.

A case which combines several features of the conditions discussed above is now under treatment in the endocrine clinic of the Louisville City Hospital:

Mr. A. S., aged 60, unemployed, was first seen in the clinic in October 1939 at which time he complained of insomnia, emotional instability, night sweats and hot flushes. His past history was confusing. He had had mumps at the age of 18 which was followed by orchitis. Shortly after this he began to accumulate excessive weight. He married at the age of 20 and his wife bore two children. At some vague time soon after marriage he became impotent. Since then he has masturbated occasionally and obtained a small amount of ejaculate without erection. By the time he first visited the clinic he had become resigned to his impotency but was annoyed by the stated symptoms which had been present for only a year.

He was a typical eunuchoid individual 6 feet, 2 inches in height and weighing 260 pounds. His lower measurements exceeded the upper and his span was greater than his height. The skin was yellowish and thin, creased with many fine wrinkles. Fat was deposited chiefly around the pelvic and pectoral girdles and the breasts were almost pendulous. His voice was high pitched. The penis was quite small and the testes, in scrotal position, were very soft, and small. The prostate could barely be made out by the palpating finger. There were sparse tufts of hair on the face and he shaved once every ten days. X-ray of the pituitary region and extremities were reported as negative. Unfortunately assays of androgens and pituitary gonadotropins in his urine could not be made.

It was considered that this patient had probably an almost total curtailment of production of male hormone at the time he had orchitis. Too little was produced thereafter to prevent eunuchoid changes from taking place, but enough to forestall the occurrence of vasomotor instability and so forth. Gradually, however, even this tiny flame died and climacteric symptoms supervened. One would think that over such a long period of time an adjustment would have been made to the hormonal imbalance, but apparently this was not the case.

Injections of 25 mgm. of testosterone propionate in sesame oil were given three times weekly. After the fourth injection the patient complained of nocturnal erections and emissions. The dose was immedi-

ately cut to 10 mgm. as we had no wish to stimulate him sexually. On this plan of treatment improvement was rapid. He continued to have an occasional feeble erection. After a month a pellet of pure testosterone was implanted beneath the skin of the subscapular region. The beneficial effects already noted were sustained, but after three weeks the pellet was extruded from the wound. Disgruntled at this turn of affairs he lapsed from treatment only to reappear in the clinic a short time ago with all his old complaints. These have again disappeared under the influence of the injected hormone.

#### FEMALE CLIMACTERIC

Testosterone is of value in certain endocrine dysfunctions in women. According to Shorr (15) Loeser was the first to demonstrate atrophic effects of androgens on the endometrium. Hartman, (43), Geist (44), Salmon (45) and others have made similar observations and have noted that menstruation is inhibited by administration of testosterone. Rothermich (14) and Rothermich and Foltz (46) reported the effect of testosterone on the vaginal smear and on the output of follicle stimulating hormone by the pituitary. Atrophic changes were caused to appear in the vaginal smears and a drop in the excretion of follicle stimulating hormone occurred. This and similar work suggested testosterone as an ideal drug in menopausal cases since its beneficial effects would not be followed by the bleeding which follows withdrawal of estrogens. Shorr (15), Rothermich (14), Birnberg (47) and others have used the hormone in such cases and have reported excellent results.

On the basis of the same experimental work Geist (44) among others has reported rapid control of menorrhagia in all but 2 of 25 cases.

#### FUNCTIONAL DYSMENORRHEA

A current concept of the cause of essential dysmenorrhea is that it results from excessive spasmodic or tetanic uterine contractions dependent on endocrine imbalance. Leonard (49) and Wilson and Kurzrok (49) have studied uterine motility in animals and in women, and have found that contractions are inhibited by testosterone propionate. Accordingly it has been used by numerous observers in dysmenorrhea of functional origin. Rubinstein and Abarbanel (50) reported relief in 15 of 17 such cases who received 5 mgm. doses throughout the cycle. Salmon (45) injecting 10 to 50 mgm. three times weekly in 28 cases of

primary dysmenorrhea obtained complete relief in 22 and partial relief in four. Permanency of relief was experienced in the majority of cases though the mechanism for this is not yet explained.

The usual side effects of testosterone, consisting of gain in weight, increase of general vigor, and increase in metabolic rate were noted in these cases. Overdosage of the hormone in women will lead to changes in the direction of virilism as pointed out by Greenhill and Freed (29). These changes consist of deepening of the voice, hirsutism, hypertrophy of the clitoris, and acne. According to Salmon (45) such changes occur only when a total dose of 500 mgm. is exceeded. These changes regress when testosterone is discontinued.

#### LACTATION

The endocrine control of lactation postpartum is well known and the depressing effect of testosterone on the pituitary will lead to inhibition of lactation. Beilly and Solomon (51) recently reported complete suppression of lactation in 58 per cent of their series and partial suppression in 40 per cent. All cases obtained relief from painful breasts.

Mrs. E. A. (patient of Dr. R. F. Vogt), aged 28, had a Caesarian section on July 11, 1940 because of placenta abruptio. A dead child was delivered. On the third postoperative day there was mild engorgement of the breasts, pain and secretion. 25 mgm. of testosterone propionate were injected intramuscularly and this was repeated in 12 hours. No other care was given the breasts. Discomfort was relieved permanently and lactation ceased. Recovery was normal and involution was normal. There were no after-pains.

#### OTHER CONDITIONS

Gratifying results have also been reported following the use of testosterone compounds in hypertrophy of the male breast (52), chronic mastitis (53), myotonia atrophica (54), endometriosis (55) and mental disorders (56). In a patient who was unable to achieve orgasm Groome (57), reported good results following repeated application of testosterone ointment to the clitoris. Plans are now under way to observe its effect in involutional melancholia and this work will be reported later. There have been also recent reports which suggest that certain cases of homosexuality may be benefited by male hormone therapy (66) and this will be investigated.

#### METHODS OF USE

The preparation and methods of adminis-



tration of testosterone and its compounds have already received brief mention. For purposes of usual parenteral administration the fatty acid esters of testosterone have been shown to be most effective and testosterone propionate and testosterone acetate have been synthesized for commercial distribution. Testosterone propionate is more widely used. It is prepared in ampules containing 5, 10 and 25 mgm. of the compound in oil solution. Injections are usually made into the muscles of the hip and are not followed by any painful sequelae. Dosage and frequency of administration are adjusted to meet the requirements of the individual case.

Percutaneous absorption has also been shown to be effective (58) and application to the skin has been employed frequently. An ointment containing 2 mgm. of testosterone or testosterone propionate per gram is available and this is rubbed into different portions of the skin at appropriate intervals. According to Abarbanel (59) the dosage by this method must be three to six times that required by injection. Subcutaneous implantation of pellets of pure hormones was first reported by Deanesly and Parkes (60) in 1937 and this method has been intensively investigated by Vest and Howard (61), Biskind (62), Straus and Biskind (63), Hartman (64) and others since then. The effects of implantation of pure testosterone, testosterone propionate and methyl testosterone appear to be equally as good as in other forms of administration and the pellets are absorbed at a rate just sufficient to meet the needs of the organism. According to Biskind this rate is approximately .1 to .2 mgm. per day; according to Vest and Howard 1 to 2 mgm. per day. By this procedure the hormone needs to be replaced only at intervals of several weeks or months, and in the interim effects are well sustained.

Foss (65), Kearns (13), and McCullagh (24) have recently reported clinical experiences with the peroral use of methyl testosterone. Twenty-five to 75 mgm. of this preparation were taken in tablet form daily by patients with testicular deficiency. Excellent results are reported and the same genital and other changes noted when the hormone is given parenterally occur with this type of therapy. We are using methyl testosterone in the clinic and results which now appear to be satisfactory, will be reported later.

#### CONCLUSIONS

The male hormone, testosterone, and its

esters, notably testosterone propionate, have been demonstrated to be of undoubted value in certain selected conditions.

Indications for its exhibition include eunuchism, eunuchoidism, and other hypogonadal states, the male climacteric, the female climacteric, functional uterine bleeding, and functional dysmenorrhea. Its value in benign prostatic hyperplasia, prepubertal cryptorchidism, impotence, gynecomastia, mastitis, muscular dystrophies and mental abnormalities is uncertain. Its use in cases of male sterility is without value.

When indications exist for its use testosterone therapy is attended by relief of symptoms arising from hormonal deficiency, retention of nitrogen and salt with consequent gain in weight, and an improved general sense of well being. Its effects are apparently quite temporary and are sustained only so long as the hormone continues to be supplied. In this sense it is comparable to insulin. Undesirable signs of virilism may accompany its long continued use in women.

Testosterone and its compounds may be administered effectively by injection, implantation, inunction and ingestion.

Three cases demonstrating testosterone therapy are reported herewith.

(BROWN BUILDING)

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### DISCUSSION

**A. Clayton McCarty, Louisville:** I also would like to call your attention to one fact you may note when the paper is published, that Dr. Hendon has included not only his own rich experience, but he has a bibliography including almost a hundred papers from international literature on this subject. So, if you have gotten in your minds, what he has had to say today, you have this endocrinological subject up to September 17, 1940. It certainly is up to date.

I think if you will consider this subject usually under the heading of the stimulating and replacement therapy you will have a better approach to it. The promiscuous use of these hormones is certainly to be condemned, not only because you waste a good deal of time and money on many patients, but also because you do a lot of harm. The production of bearded, deep-voiced women or apoplectic, large-breasted men with priapism isn't to be desired. These certainly are harmful results, to be avoided, in spite of the fact that even such a fine man as Brown-Sequard "shot" himself. As Dr. Hendon has said in his paper, the rubbing in of this material in certain genital regions, thus producing beneficial results, is not a worthy reason for going ahead with such treatment. On the other hand, I feel sure that we are missing a good many patients by not realizing what Dr. Hendon has brought out; namely, that some of these men with headaches, a great deal of excessive perspiration, and other nervous symptoms, are really going through the change of life and are entitled to some of this substitutional therapy. It certainly is well known that in the male these hormones will replace missing or sub-par gonadal tissue due to surgery, disease, or climacteric changes in the gonad, and you can use this substitutional replacement therapy with a great deal of benefit. Hypogenital conditions are those where it certainly is not beneficial, as stimulation therapy is indicated.

It is well to note that just because there is less than the normal amount of gonadal tissue is no good reason for going ahead with this therapy. You sometimes see women who have had their ovaries removed and apparently need no further replacement therapy; they get along beautifully. Likewise, it is true with some men, and giving a fair trial without therapy is oftentimes a good thing.

It is not surprising that these male hormone substances will give benefit in some women also, because these sterols and estrogens are, after all

first cousins, or certainly related. Therefore, it is a fact that you get very definite benefit in some types of menorrhagia, certainly the menorrhagia of the change, and in breast cases where you want to inhibit the lactation. You certainly get beautiful results in those cases. You need not use enough of the medicine to cause unpleasant changes in the women. Also in some dysmenorrheas you can definitely count on the male sex hormone to give some benefit.

On the other hand, spermatogenesis is certainly not benefited; it is really harmed. If you will use Gonadogen or Gonadin or one of those products, you will get a stimulating effect which will be of great value. With respect to the much mooted question of using male hormones in impotence, here I think one always ought to be sure to rule out spinal cord disease or injury, because it is in this region that the so-called sex centers exist. If you have pathology there, you would not expect to help it any by shooting a lot of material into the patient.

Further, of course, is the matter of the psychic effect which Dr. Hendon has mentioned. One of the writers at the Mayo Clinic spoke of a case where the husband with impotence was very definitely benefited by moving his bedroom away from three sisters-in-law and a mother-in-law. There is no question about it that we all see patients from time to time whose impotence seems to be only at home. A psychic benefit to some of these patients, and not glandular, is needed.

I suppose everyone in the room is interested in the effect that any of these hormones might have on prostatic conditions, because prostatic hypertrophy is so little understood and seems to come with so little rhyme or reason, at times. However, I think many prostatic cases are treated very poorly often by continuously injecting them with these hormone materials, rather than studying the actual cause of the hypertrophied prostate or even trying to benefit it surgically.

It is well known that these male hormone substances will give a sense of well-being to the male, and for that reason probably they are justified at times, but I am sure they are used altogether too much.

As for the stimulating use of some of these male sex hormones, Dr. Hendon has called attention previously to the fact that in the so-called Frohlick's syndrome and Frohlick-like syndromes there is less value in anterior pituitary-like substances than in putting the patient on diet or exercise. Certainly cryptorchidism can be treated with anterior pituitary-like substances, but so many of these cases, if they are just given a little time to go through puberty, will be all right just the same.

The mode of therapy is mentioned. Most of us

are using the injections, but more recently it has become popular to use implants, inunctions or tablets which may be given by mouth. Dosage is still a question, but the determination is possible, and I think will become increasingly simple. Then we will be using these substances with more judgment.

**Laman Gray, Louisville:** Dr. Hendon has given a most important paper here, for two reasons: because it represents an elaborate investigation of the literature, and because of his real experience in the endocrine division of the Louisville City Hospital. Testosterone propionate is a gonad depressant, depressing both the testicle and the ovary. In women there are very few real indications for testosterone. Of course, in the literature one might cite its use in the cure of any condition that one can imagine in women.

Probably its best use is in those few cases of premenstrual pain in the breasts, occasionally with severe swelling and pain, possibly due to an excess of estrogenic hormone. Excellent results may be obtained in these cases (the majority have such slight symptoms that they are unimportant to treat) using 5 to 10 mg. doses once or twice between periods.

Two other small indications for this hormone are in menopausal patients. On the one hand are the patients who bleed very easily when they receive estrogenic hormone. Such conditions are most annoying. Any patient will bleed if she receives enough, but some patients bleed with relatively small doses. Menopausal symptoms may be relieved by testosterone in such cases, but there seems no indication to use this hormone in patients who will tolerate estrogenic hormone, the normal ovarian secretion. On the other hand, there are patients with menopausal symptoms which have developed following castration because of pelvic endometriosis. This condition, in which there is a growth of endometrium out in the pelvic cavity on the parietal peritoneum or even extending into the bowel, will progress after oophorectomy if estrogenic hormone is given. On the other hand, implants will atrophy and symptoms may be relieved if testosterone propionate is given.

Testosterone is also of value in dysmenorrhea and menometrorrhagia, that is in relieving the immediate symptoms. In relief of dysmenorrhea its effect apparently is by preventing normal ovarian action, by preventing ovulation and making the patient sterile for that particular cycle. After the completion of such hormone therapy ovulation, as a rule, will return and the pain will return just as before; therefore, it seems of little or no value in the treatment of dysmenorrhea. Similarly, in the treatment of menometrorrhagia, it will cause an ovarian depressant action, with subsequent atrophy of the endome-

trium, and will control the bleeding, but in our experience the bleeding will recur when the hormone is discontinued.

One such case was that of a woman of twenty-five who had been treated for seven years with all hormones that we now know of. Finally, she was given testosterone, which did slow up the bleeding. Because it did not stop entirely, she was given 600 mg. within three weeks. The bleeding stopped. There was growth of the clitoris, so that it looked like a small penis, at least the size of a small finger. However, after several months the clitoris regressed to normal size and the bleeding returned, to be just as severe as ever.

## APPENDICEAL PERITONITIS

WOOLFOLK BARROW, M. D.

Lexington

Appendiceal peritonitis is of particular interest to the medical profession, for in the problem of the prevention and treatment of appendiceal peritonitis lies the key to the problem of "appendicitis."

Of 1039 consecutive patients with acute appendicitis previously reviewed<sup>1</sup>, 860 (83%) were admitted to the hospital prior to perforation. In this group of patients, seven died, or a mortality rate of 0.8%. One hundred and seventy-nine patients (17%) had appendiceal peritonitis at the time of entry<sup>1</sup>, of which number 40 (27.3%) died. Or to express it differently, 88% of the total number of deaths from acute appendicitis occurred in patients with appendiceal peritonitis at the time of entry to the hospital, although this latter group formed but 17% of the total number.

If every acutely inflamed appendix were removed before perforation had occurred, death from appendicitis would be rare and vermiform process would soon lose its reputation as "Intraperitoneal enemy number one."

The factors responsible for the development of appendiceal peritonitis, delay and catharsis, are too well acknowledged to warrant further discussion here. It might be wise, however, to point out that the proportion of patients with appendiceal peritonitis at the time of entry to the hospital and the case fatality rate of acute appendicitis are higher in the very young and very old,<sup>2,3</sup> probably due to greater difficulty and greater hesitation in making the diagnosis of acute appendicitis in the extremes of life. In our opinion, exploratory

Read before the Kentucky State Medical Association at Lexington, September 16-19, 1940.



laparotomy should be undertaken in every patient with abdominal pain, regardless of the age of the patient when the vermiform appendix cannot be excluded with reasonable certainty as a cause of the patient's symptoms. It is also interesting to note that four percent of the patients entering the hospital within twenty-four hours of the onset of symptoms had appendiceal peritonitis at the time of entry<sup>1</sup>. There is no time to lose.

Coincident with perforation of the acutely inflamed appendix and the onset of peritonitis, there are certain definite abnormalities of physiologic function which constantly occur. Briefly summarized, these are engorgement of splanchnic blood vessels; loss of tone, functional paralysis and distention of intestinal musculature, i.e.—adynamic ileus; loss of fluid and electrolytes into the gastro-intestinal tract; and toxemia due to intraperitoneal sepsis<sup>4</sup>. Treatment of the patient with appendiceal peritonitis should be directed in large measure toward the correction of the physiologic abnormalities. Certain definite procedures have been found helpful in this connection<sup>5</sup> and they will now be considered.

The dilation and congestion of splanchnic blood vessels not only increases abdominal distention but may also account in some measure for the shock-like condition of some patients with appendiceal peritonitis by withdrawing a large quantity of blood from the systemic circulation<sup>9</sup>. (This loss may be so great that prompt blood transfusion of the patient with appendiceal peritonitis is demanded.) The splanchnic blood vessels lie so deeply that they are not affected by external applications. There is, however, a reciprocal relationship between the cutaneous blood vessels of the abdominal wall and the splanchnic blood vessels. So that when cutaneous vasodilation is produced by the application of external heat, there is reflex vasoconstriction of splanchnic vessels. And by the application of external heat to the abdomen of the patient with appendiceal peritonitis, it is possible to cause cutaneous vasodilation and reflex splanchnic vasoconstriction and thus decrease abdominal distention as well as increase the amount of blood available to the systemic circulation.

The exhibition of adrenal cortex extract will also do much to relieve the tendency to circulatory collapse, by combatting toxemia and helping maintain fluid and elec-

trolyte balance by its action upon capillary endothelium.

The functional paralysis and loss of tone of the gastrointestinal tract is followed by the accumulation of fluid, electrolytes and gas within the lumen of the intestine. Indeed, fluid or food taken by the patient with adynamic ileus is not absorbed and merely increased the distention and discomfort of these patients. For this reason, nothing by mouth either liquid or solid, is allowed the patient with appendiceal peritonitis until gastro-intestinal function is restored as evidenced by the detection of audible peristalsis on auscultation of the abdomen. The fluid and gas accumulated within the intestinal lumen can be removed in part by constant suction of the type advocated by Wangenstein through a small Jutte or Levine tube, or preferably through a double lumen tube as suggested by Miller and Abbott<sup>6</sup>.

This loss of fluids and electrolytes into the atonic intestine, as well as that required by the patient's metabolic processes should be compensated for by parenteral administration. As pointed out by Collier and Maddock<sup>7</sup>, satisfactory water balance is obtained when the patient has an adequate urinary output. This can usually be obtained by the intravenous administration of 1500 cc's of 5% glucose in normal saline in the morning and 1500 cc's of 5 per cent glucose in distilled water in the evening. Multiple small transfusions may do much to overcome the tendency to hypoproteinemia<sup>8</sup> which these patients show particularly where food by mouth must be withheld for a prolonged period.

The gas within the intestinal lumen is largely nitrogen which is absorbed poorly. By the inhalation of concentrated oxygen (95-100 per cent) this nitrogen within the intestinal lumen is replaced by oxygen through diffusion from and into the blood stream. The oxygen within the intestinal lumen is readily absorbed and distention is thus reduced<sup>10 11 12</sup>. The inhalation of oxygen in the patient desperately ill with peritonitis may also lighten the circulatory burden of such a patient. It is not infrequent to find a decrease of twenty or more beats per minute in the pulse rate following the inhalation of concentrated oxygen.

It has been shown by Ochsner, Gage, and Cutting<sup>13</sup> among others<sup>14</sup> that morphine while decreasing the amplitude of peristaltic contractions, increases the tone of intestinal musculature, and its exhibition

in adequate dosage at regular intervals in patients with appendiceal peritonitis has been found most helpful both for its tonic action upon the intestinal musculature and its sedative action upon the patient.

Sulphanilamide may do much to help the patient with appendiceal peritonitis overcome his infection. It may be administered subcutaneously as an 0.8 per cent solution in amounts sufficient to maintain a blood level of 6-10 milligrams per cent. Ravdin, Rhoads and Lockwood<sup>14</sup> report a reduction in the mortality of acute appendicitis of 50 per cent following the routine use of sulphanilamide. The other details of treatment were unchanged.

Physical inactivity of the patient as well as complete functional rest of the intestine will do much to aid localization of intraperitoneal sepsis and the patient should be kept as quiet as possible.

Elevation of the head of the patient's bed twelve or more inches will favor localization of secondary abscesses, if any, in the pelvis where they can be detected and drained easily rather than in the subphrenic space where detection and treatment are more difficult.

An equally important part of the treatment of the patient with appendiceal peritonitis is constant search for and appropriate treatment of secondary intra-peritoneal abscesses. (Pyelophlebitis and intra-hepatic abscess will not be considered.) These will be considered in inverse order of frequency.

The least frequent secondary intraperitoneal abscess is found in the subphrenic space. It may follow the original infection quickly or only after a prolonged interval. It is probable that subphrenic space infection without abscess formation is not infrequent and that it subsides spontaneously. Where definite abscess formation has occurred drainage is necessary. This has been accomplished satisfactorily through the bed of the twelfth rib as advocated by Nather and Ochsner<sup>16</sup>.

Abscesses between the liver and the transverse colon are difficult to detect. In addition to the constitutional symptoms of continued sepsis, a mass in this region may be palpable. Incision is sometimes necessary and a short oblique sub-costal incision is sufficient. It is our impression that the great majority of subhepatic abscesses will subside spontaneously. Secondary abscesses in the left iliac fossa as pointed out by Dr. Alton Ochsner<sup>17</sup> are seen only in those patients with a shallow

cul-de-sac, particularly in children. Drainage through the left side of the abdominal wall is rarely necessary for drainage of the associated cul-de-sac is usually sufficient for both.

Secondary infection in the cul-de-sac is, in our opinion, an almost constant companion to generalized peritonitis of appendiceal origin. Not a few of them go on to abscess formation, but in many patients the induration and pain felt on rectal examination will subside spontaneously. Besides the constitutional signs and symptoms of continued sepsis, the patient with a cul-de-sac abscess has a loss of tone of the rectal sphincter as well as a boggy fluctuant mass palpable on rectal examination. In the male patient, urinary retention may be the first symptom of a cul-de-sac abscess. Drainage through the rectum preceded by catheterization of the bladder and aspiration of the abscess has been satisfactory.

An abscess in the right iliac fossa can be palpated almost always. In some instances, they may attain tremendous size and yet give the patient no discomfort, either local or constitutional in nature. In other instances, a relatively small right iliac fossa abscess may be associated with severe systemic toxemia and demand drainage. Our experience in these patients has been similar to that of Lehman and Parker<sup>19</sup> who advise delay in operation until forced to interfere by a rising pulse and increasing fever, not only because the majority will resolve spontaneously, but also because a rather large mass in this region may be composed of indurated and inflamed mesentery and omentum and adherent loops of bowel with but little purulent material. Miller, Fell, and Brock<sup>20</sup> report spontaneous resolution in 89 per cent of the patients in whom a mass was felt in the right lower quadrant. When drainage has been necessary, the McBurney incision and extraperitoneal approach have been used.

Much has been said and written in regard to the delayed or conservative treatment of appendiceal peritonitis as opposed to immediate operation—a controversy which is by no means settled. We have discussed it in detail elsewhere<sup>1</sup> and will not do so here. But regardless of whether or not delayed or immediate operation is used in the treatment of the patient with appendiceal peritonitis, supportive treatment along physiologic principles as well as constant search for and appropriate treatment of secondary abscesses will do much to shorten morbidity and decrease mortality. In-



deed, we believe that more adequate treatment has contributed materially to the gratifying decrease in deaths from appendicitis in the United States as a whole. According to the figures compiled by the United States Bureau of the Census, the mortality rate from appendicitis in the United States has decreased 27.8 per cent from 1930 to 1937 (Death rate per 100,000 population for appendicitis 1930-15.3: 1931-15.2: 1932-14.2: 1933-14.1: 1934-14.3: 1935-12.7: 1936-12.8: 1937-11.9) (U. S. Government figures). According to the Statistical Bulletin of the Metropolitan Life Insurance Co., this trend continues.

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## DISCUSSION

**E. Dargan Smith:** Reports of large appendiceal series give an average mortality rate, in their groups associated with diffuse peritonitis, of about forty per cent. Essayists have termed this mortality, which claims 17,000 victims a year, a national disgrace, as it is. After years of

attempts to educate the public and the profession neglected cases continue to come to operation.

Obviously lowering of the mortality rate must come chiefly from improved methods of treatment. There have been improvements, as for examples the Levine tube for duodenal suction, the Dorrance appendicectomy, Ravdin's sulfanilamide hypodermoclysis, and less recently Kehrer's cigarette drain, intravenous dextrose, transfusions and mechanical aspiration of septic fluids. That the mortality rate has not concurrently improved may be due in part to the willingness of the surgeon to accept more desperate cases, as adjuncts to treatment are developed.

The most essential contributor to recovery is unquestionably adequate drainage. Since J. Shelton Horsley has explained the biologic basis of drainage as a reversal of the lymphatic flow in the area of infection, it becomes obvious that the free use of a substance in the peritoneum, which combined marked osmotic action, with an effective antiseptic property and which would be relatively non-irritating to body tissues, would induce profuse drainage and permit recovery of the patient. Such a substance is glycerin; and glycerin osmotic drainage is a physiologic approach to the problem of peritoneal absorption.

The use of glycerin osmotic drainage, with adherence to a simple but exact technique, in the Owensboro-Daviess County Hospital, has been followed by uniformly pleasing results. Since this procedure was instituted, in December 1937, there has not been a death from appendiceal or pelvic peritonitis in which the technic was followed. The method of use is not difficult. Before closing the abdomen autoclaved glycerin is poured over the inflamed peritoneum, as much as a half pint of the solute substance at times, to assure a thorough bathing of the infected area. No effort is made to remove the free glycerin, and drainage by means of a special drain is provided. This drain is the familiar Kehrer cigarette drain with a size fourteen, French, catheter as a core so that additional glycerin may be injected to prolong the osmotic action as indicated. The drain is usually brought out through an accessory stab incision. The discharge is profuse, requiring frequent change of the draw-sheet, but even the nurses who have to mop up the mess are enthusiastic over the consistently favorable course these patients have taken. After operation there is usually a prompt drop in temperature and pulse rate, the temperature reaching normal between the second and fifth days and the pulse seldom being as rapid as the preoperative readings.

The establishment of the following routine, in the treatment of ruptured appendices with diffusing peritonitis, will materially improve our results:

1. Spinal Anesthesia—usually.
2. McBurney's Incision—with localization.
3. Aspiration of Septic Fluids.
4. Retention Catheter Appendicectomy—often.
5. Osmotic Drainage—routine.
6. Duodenal Suction—with nausea.
7. Small Blood Transfusions—with anemia.
8. Parenteral Fluids—always.
9. Sulfanilamide—frequently.

**Woolfolk Barrow**, (in closing): I was particularly interested in Dr. Smith's exhibit last year at Bowling Green which showed his procedure in some detail. I think the crux of the appendicitis problem, as everyone will agree, is that time is the important element. As Dr. Francis Massie says, it is better to have the junior interne operate upon the patient with acute appendicitis in the first twelve hours than to wait forty-eight hours for the visiting surgeon.

In this series of patients, 40 per cent who waited over 72 hours to come to the hospital had appendiceal peritonitis, 27 percent who came in between twenty-four and seventy-two hours of the onset had appendiceal peritonitis. Four percent who came within the first twenty-four hours after the onset of the disease had perforated appendicitis. There is apparently no time to lose.

## HISTORY OF THE JEFFERSON COUNTY MEDICAL SOCIETY

E. LEE HEFLIN, M. D.

Louisville

On Friday night, March 4, 1892, 49 years ago, a group of prominent physicians of Jefferson County, Kentucky, met in the Polytechnic Building on Fourth street, now occupied by the Kaufman-Straus Company, to form a medical society to be known as the Jefferson County Medical Society.

The following officers were elected:—President, George W. Griffiths; First Vice-President, S. B. Miller; Second Vice President, L. S. McMurry; Secretary and Treasurer, W. Carroll Chapman; Judicial Council, W. C. Dugan, J. F. Purdom and P. B. Scott.

The Objects of the Society were: The mutual advancement of its members in the dissemination of medical research, the discussions of questions of practical interest, the maintenance of the honor and dignity of the regular medical profession, to secure adequate representation of the medical profession of Jefferson County in

both the State and the American Medical Associations.

A Constitution and By-Laws governing the Society were framed and adopted. Some interesting essays and clinical reports were promised for the next meeting. The Society adjourned to meet at the call of the president in the Chamber of Aldermen. All reputable physicians of Louisville and Jefferson County were not only invited to attend but were urged to join the Society. The Organization was considered quite a success.

The year 1892, was memorable for other important events in Louisville: The Children's Free Hospital was opened on January 25; May 2, 1892, DuPont proposed to present to the City the Manual Training School for white boys.

The 37th meeting of the State Medical Society with a membership of 400 was held in Louisville that year, May 4, 5, and 6th. At this meeting, Dr. J. N. McCormack of Bowling Green, offered a resolution that a committee of five be appointed by the Chair to report to the next meeting a plan for the organization of a medical society in each county in Kentucky as an auxiliary to the Kentucky State Medical Society and that the members of the county societies were to become members of the state society. Thus began the splendid work of Dr. McCormack which continued through many long trying years, to be finally crowned with success. The fruition of his years of labor is our heritage today.

During the year 1892, land was secured for Western or Shawnee Park and many acres were added to Cherokee Park. There was a financial panic in 1892 and from a financial point of view the history of the time was dark and not pleasing.

The population of Louisville in 1892 was 188,914 and 325 doctors are listed in that year's City directory. Louisville was the medical center of the South, having six medical schools and graduating from 400 to 500 students annually. The Louisville Medical College alone had 102 graduates in 1892. This is quite a contrast from that of our present time, there were only 84 graduates from the University of Louisville in 1940, this being about the average number for the last six years.

The Jefferson County Medical Society continued to meet monthly for one year. The proceedings of the Society were published in the New Albany Medical Herald which was edited by Dr. W. Carroll Chapman, 3023 Portland Avenue who was at that time the secretary and treasurer of



the Jefferson County Medical Society. Allow me to read an editorial from the New Albany Medical Herald dated February, 1893, not only for its information but because it is timely and it expresses my views so well.

"While it is the duty of every progressive county to have a representative medical society, the matter does not rest there. It is still further the duty of the members of the medical profession to give it their individual active support. This means not only to join and to pay dues but to attend, take part in the proceedings and to furnish the society with the richest practical material at one's disposal. Each member imbued with this idea will produce a live wide awake society that is sure to be heard from in the larger organizations.

Jefferson County has a representative medical society that, heartily supported by its members and the members of the local profession, some few of whom have not yet joined, has as fine, if not the finest opportunities of any organization of its kind in America. Located at Louisville, with its meeting place in the City Hall, Board of Alderman's Chamber, a room than which there is none finer or with more splendid acoustic properties in the South or West, it is surrounded or rather claims in its very midst medical and surgical ability second to none in the country.

The Society meets monthly and announces the subjects for discussion at the next meeting. These subjects are varied, medical or surgical, with now and then a paper on some special line of work, so that general practitioners and specialists alike may become interested. Next month will be the twelfth since its organization. Speaking from a comparison with other societies, the meetings have been a success. On one or two occasions, features unavoidable under the circumstances have manifested themselves, once a slight violation of the rules for discussions, barely worth mentioning, another time, the publication of the proceedings of the meeting in the next morning's paper. The officers had succeeded in preventing this previously and while they regret exceedingly that such was done on this occasion, believe it will never be repeated. Whether or not this injured the society, we are not prepared to say but its growth has continued since until its roster numbers the majority of the physicians in the county and among them are the names of the most prominent.

When it was organized, quite a number prognosticated that it would die in from

three to six months. It has long passed that age and at each meeting shows new sparks of vitality that give it the appearance of come to stay.

Every physician seems to be of the opinion that Jefferson County and Louisville should have a representative medical society and if everyone of this opinion would take his share of interest, we would have one which would be representative in the fullest sense of the word.

Next month the third Wednesday in March, will be held the annual meeting at which officers for the ensuing year will be elected. We believe it is the duty of every physician who is interested in the welfare of the society to attend and assist in the selection of officials that will be perfectly satisfactory to the majority. Then will everyone feel that he has some share in the organization and the Society will be placed on a still more popular and substantial phase."

The Society met March 15, 1893, J. M. Krim, President pro tem in the chair. The following officers were elected: President, Ap Morgan Vance, Secretary and Treasurer, James Guest.

A. P. Vance read a paper on "The Use and Abuse of Trusses."

After diligent search, I can find no record or even mention of the Society after this meeting. It vanished like the lost tribes of Israel, it went into a Rip Van Winkle sleep, not to awaken until the year 1902. What could have caused the sudden demise of the Society at this time? It is largely speculative—there being no written record. I asked Dr. Louis Frank who is one of the few surviving members of that early organization if he could give a reason for the sudden collapse of the Society. He seemed to think that a lack of interest was the cause.

As there were many splendid thriving societies at that time, the Medico-Chirurgical, the Louisville Surgical, the Louisville Clinical and others, perhaps the members did not feel the need for a county society linked with the State and National Societies. We know that there was a great rivalry between the medical schools and much bitterness between the professors in the schools, also considerable petty jealousies among the practicing physicians which often resulted in bitter quarrels and even personal encounters. I believe that this had much to do with the disruption of the Society. The financial depression of that year may have added to some extent to the failure of the organization.

In 1902, after nine years, again a group

of prominent physicians assembled in the School Board Building, 5th and Walnut Streets, on Thursday at noon, April 24, 1902, to reorganize or renew the Jefferson County Medical Society. Dr. Ap Morgan Vance, the last president, was the temporary chairman. The following officers were elected: President, Wm. Bailey; Vice-President, S. O. Witherbee; Secretary, R. Alexander Bate; Treasurer, B. A. Allan.

A second meeting was held in the School Board Building, May 1, 1902. A third meeting was held in the same place October 28, 1902. These meetings were devoted entirely to organization. It seems that much time was required to get the Society functioning but it has continued to meet since that time and there are minutes of nearly all of the meetings that have been held.

The next meeting which was held in Galt House on Tuesday, December 23, 1902 was designated "the first regular meeting of the Jefferson County Medical Society" and it is from this date that our meetings are numbered, tonight being the 821st.

In those early days, the meetings were held irregularly, but were well attended, from 70 to 80 being present. Dues were \$5.00 annually which included dues to State Society.

I hope that I will not tire you but I would like to give you the program of the first meeting at the Galt House, similar programs were continued for some time. Compare this program with one of our programs of today.

#### ORDER OF PROCEEDINGS

Meeting called to order at 2:00 P. M. by President, Wm. Bailey.

Prayer—Rev. E. L. Powell.

Minutes—R. Alexander Bate.

Reports of Committees.

Presentation of Clinical Cases—Volunteer.

Presentation of Pathological Specimens—Volunteer.

Report of Cases.

Unfinished Business.

Reading of Papers—4:30 P. M.

Hysteria As The Surgeon Sees It, by Ap Morgan Vance, Discussion led by Turner Anderson, W. C. Dugan, Cuthbert Thompson, L. S. McMurtry, James Bullitt, George A. Hendon.

Pneumonia, by John G. Cecil, discussion led by F. C. Wilson, F. C. Simpson, Henry Pusey, Thomas Hunt Stucky, Walter F. Boggess, Henry Enos Tuley, Carl Weidner, John A. Ouchterlony.

Sebaceous Cysts of the Scrotum.

Abdominal Pregnancy with Embryos.

Exhibition of Specimen with Pathological Report by A. M. Cartledge.

Discussion led by F. W. Samuel, J. Garland Sherill, W. R. Blue, W. H. Wathen, August Schachner.

Clinical Cases by Wm. Cheatham, discussion led by A. O. Pfingst, J. M. Ray, F. M. Coons, S. G. Dabney.

Evening Session 8:00 P. M.

Election of Officers followed by a banquet.

How different today! We try to begin the meetings at 7:45 and finish by 10 o'clock, P. M. Two hours is not too much to ask of the members twice a month.

As we look through the minutes, we note certain changes. The first change in the program came at the seventh meeting, April 19, 1904, when prayer was discontinued. Why this was the first change, I leave it to you to answer.

The second change came on September 14, 1905, the 14th meeting when the afternoon session was discontinued, meetings were held only in the evenings. By 1908 after a period of about six years, the Society had changed its meeting place and had eliminated the banquets and all refreshments. The last change to be made was the giving up of the refreshments which were paid for at first by the members, then later for a time by the Society.

When the Society was first formed and for some time after the reorganization, the date of the meetings was set by the president or the Executive Committee. This seems strange, one would think that a regular time for the meetings would be one of the first things settled. On February 20, 1906, the by-laws were changed to read: The Society shall meet on the first or second Tuesday of the month to be decided by the Executive Committee. At that meeting, it also was decided that a buffet luncheon should be served at the expense of the Society. It was not until May 29, 1906, after a period of three and one half years, that J. Rowan Morrison suggested that the fourth Monday night in each month be the regular meeting night as that did not conflict with any other medical meetings. The motion was carried. These monthly meetings continued for five years, until 1911, when weekly meetings were begun. The weekly meetings were continued for seven years, until May 6, 1918, when the Society voted to meet semi-monthly, the first and third Monday nights and we are still continuing the same schedule.

Several of our members have expressed a desire to attend the meetings but due to busy office practice on Monday nights, say that it is impossible for them to attend.



For almost 23 years, the Society has met on the first and third Mondays. It is a question if the attendance would be increased by changing to the second and fourth Wednesday nights which are practically open dates. However, this is a question to be decided by the Society. How to increase attendance has been a problem which has worried every president of the Society.

The Society met at the Galt House from December, 1902 to November 25, 1908. The first meeting in the Atherton Building, now the Francis Building, was on December 14, 1908. The membership at that time was 331 and the rental of the space in the Atherton Building was \$1,600.00 a year. The Society continued to meet in the Atherton Building until 1914 when it was decided to move to the City Hospital. The last meeting held in the Atherton Building was on March 23, 1914, and the first meeting held in the City Hospital was on April 6, 1914.

The Society made an agreement with the City authorities that it would pay for preparing the amphitheatre which would be a permanent meeting place for the Society, they accordingly paid for the repairs and the furnishings at the City Hospital.

The idea that the Society should have a home of its own has been a subject that has been dear to the hearts of many ever since the early days of the Society. It has been a perennial plant, springing up every year or two. It was suggested at our last annual meeting and voted down. From time to time, committees have been appointed to further the purchase of a home, sites have been selected, funds have been pledged and the Society has even voted to purchase a definite location. *That was the last of that.*

The buying of a permanent meeting place was first suggested in February, 1906, when the Society was about three years old. John J. Moren, the president, appointed a committee with William Bailey, as chairman, to solicit funds for this purpose. The following is copied from the minutes of March 27, 1906, one month after the appointment of the committee. "William Bailey, being absent, Ap Morgan Vance made an exhaustive report in writing of a plan to organize a stock company for the purpose of buying and maintaining a home for the Society to be known as The Academy of Medicine." The report of the committee was adopted unanimously, and *that was the last of that.*

This subject has been before the Society many times, perhaps the nearest to the fruition of our dreams was in 1930, when

the president, Dr. Emmett Horine, had \$16,000.00 pledged, a site was selected and the members voted to buy and *that was the last of that.*

We have comfortable quarters in which to meet, fairly centrally located and with no rent to pay. Most of the members seem satisfied with the present arrangement. However, I believe that eventually the Jefferson County Medical Society will want a permanent home of its own, and it seems to me that now is the time to prepare for the future by establishing a building fund to be added to from time to time by donations and legacies and possibly by small yearly assessments.

It seems appropriate to name the members who have served you during these years in the two most important offices of president and secretary.

Year	Presidents
1892—	George W. Griffiths
1893—	Ap Morgan Vance
1902—	Wm. Bailey
1903—	Wm. Bailey (Re-elected)
1904—	Horace H. Grant
1905—	Wm. Cheatham
1906—	John J. Moren
1907—	Sidney J. Meyer
1908—	B. F. Zimmerman
1909—	Charles W. Hibbitt
1910—	E. S. Allen
1911—	Virgil Simpson
1912—	Edward Speidel
1913—	Dunning S. Wilson
1914—	C. H. Harris
1915—	Ap Morgan Vance
1916—	J. Garland Sherrill
1917—	Granville S. Hanes
1918—	E. L. Henderson
1919—	Claud Hoffman
1920—	Oscar Bloch
1921—	John K. Freeman
1922—	Charles Farmer
1923—	Cal. G. Arnold
1924—	J. B. Lukins
1925—	E. R. Palmer
1926—	W. A. Jenkins
1927—	W. E. Gardner
1928—	W. Hamilton Long
1929—	C. G. Forsee
1930—	Emmett Horine
1931—	John D. Allen
1932—	Guy Aud
1933—	I. T. Fugate
1934—	Walter I. Hume
1935—	James H. Pritchett
1936—	A. Clayton McCarty
1937—	Barnett Owen

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- 1938—J. Duffy Hancock  
1939—Oscar O. Miller  
1940—E. Lee Heflin  
1941—M. J. Henry

### Year                      Secretary

- 1892—W. Carrol Chapman  
1893—James Guest  
1902—R. Alexander Bate  
1903—R. Alexander Bate (Re-elected)  
1904—Henry Enos Tuley  
1905—E. O. Witherspoon  
1906—J. Hunter Peak  
1907—Charles W. Hibbitt  
1908—Virgil Simpson  
1910—Dunning S. Wilson  
1912—A. G. L. Perceful  
1914—E. L. Henderson  
1916—Owsley Grant and W. Hamilton Long  
1918—Claud G. Hoffman  
1919—D. Y. Keith  
1920—Albro L. Parsons  
1921—Cal. G. Arnold  
1922—J. B. Lukins  
1924—Orville R. Miller  
1926—Frederick G. Speidel  
1928—Frank M. Stites  
1930—Joseph C. Bell  
1932—Uly H. Smith  
1933—Charles M. Edelen  
1935—Uly H. Smith  
1937—Arthur T. Hurst  
1939—Woodford B. Troutman

It has been my aim to give you some of the history of the formation and growth of our society.

We are pleased to state that the society is in good condition and it is your duty and my duty to see that it continues to grow so that it can be more beneficial to the medical profession and render better service to the community.

**Why We Sleep**—Crayfish living in the dark sound-proof rooms are providing clues to the little understood biological rhythms that underlie sleep, reproductive activity and hibernation, Dr. John H. Welsh of the Harvard Biological Laboratories recently told the American Society of Zoologists. On the strength of his studies he is convinced that explanations of sleep based on the theory that there is a "sleep center" in the brain which acts as an internal master clock of human activity are wrong. He believes that he has demonstrated, in both the nervous and endocrine systems in twenty-four hour cycles which persist in darkness.

### NEWS ITEMS

Dr. William Keith Crume and Mrs. Crume, Bardstown, announces the arrival of Miss Josephine Bowman Crume, Norton Infirmary, February 21st.

Dr. Robert F. Monroe and Mrs. Monroe, Louisville, announces the birth of a son at the Baptist Hospital.

Governor Keen Johnson proclaimed April as "Cancer Control Month" with the statement that 2,361 Kentuckians were victims of cancer in 1940.

The American Association of Obstetrics, Gynecologists and Abdominal Surgeons announces that an award of \$150.00 to be known as the Foundation Prize will be offered each year to interns, residents, or graduate students in the above subjects. For further information write J. R. Bloss, M. D., Huntington, West Virginia.

The American Association for the Study of Goiter will hold its annual meeting in the Hotel Statler, Boston, Massachusetts, May 12, 13 and 14, 1941, instead of the date originally announced. Program for the three day meeting will consist of papers dealing with goiter and other diseases of the thyroid gland, dry clinics and demonstrations. For further information communicate with W. Blair Mosser, M. D. Corresponding Secretary, Kane, Pa.

As much as we individually might be in sympathy with the "Bundles for Britain" movement, one recent phase of it hardly has our approval.

At several points in the country there has been a movement to collect the samples left by pharmaceutical detail men in physicians' offices and include them in the shipments for British Relief. This is an expensive and uncontrolled way of supplying pharmaceuticals.

Most all of the pharmaceutical manufacturers have individually donated supplies with vitamin capsules and other needed pharmaceutical products to the British Relief at no charge.

The packaging of a sample increases the cost and if these samples are collected and sent to Britain, then the purpose for which they were intended, that is, for the use of physicians, is not accomplished, and the heterogenous material that reaches British Relief probably would have little value. Many samples left physicians would be dangerous if used indiscriminately without the advice of a physician.

In some cases individual City and County Medical Societies have been asked to cooperate with the collection of these samples. It is our opinion that such cooperation should be refused for the obvious reasons stated.



# Kentucky Medical Journal

Published Monthly By  
THE KENTUCKY MEDICAL ASSOCIATION  
Incorporated

Entered as second class matter October 22, 1906, at the Postoffice at Bowling Green, Ky., under act of Congress, March 8, 1879.

Subscription Price .....\$5.00  
Edited Under the Supervision of the Council

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NEXT MEETING LOUISVILLE

SEPTEMBER 29—OCTOBER 3, 1941

## COUNTY SOCIETY REPORTS

**Bell:** The Bell County Medical Society held its meeting at the Cumberland Hotel, February 21st. There were fourteen members present at the meeting. The paper was read by Dr. Edward S. Wilson on Some Recent Thoughts About Diabetes.

John Broshear and R. F. Porter have been called from the Medical Reserve to active duty in the army. Dr. Broshear is anticipating a transfer to the army aviation division.

EDWARD S. WILSON, M. D., Secretary.

**Bell:** The monthly meeting of the Bell County Medical Society was held at Pineville, March 14th. Eighteen physicians were present. Our councilor W. K. Buttermore also attended. There was a thorough discussion of the article in the recent State Journal, An Alleged Unholy Alliance.

Sam Flowers presented a paper, The Injection Treatment of Hemorrhoids, which was well discussed.

EDWARD S. WILSON, M. D., Secretary.

**Campbell-Kenton:** The Campbell-Kenton County Medical Society met at St. Elizabeth Hospital, Covington, March 6th. Twenty-five members were present. The meeting was called to order at 8:50 P. M. by the president, Clay Crawford.

The secretary read the minutes of the last meeting, and they were approved.

Lawrence Quill, of Covington, was elected to membership in the society.

H. C. White announced that the Licking Valley meeting would be held at Erlanger on March 13th, and urged that all members of the local society make an effort to attend. Dr. White also called the attention of the members present to the bulletin from the State Board of Health regarding free supplies of Sulfapyridine and Sulfathiazole to be used in the treatment of pneumonia in indigent patients.

The question of the possible establishment of a Bureau of Sanitation and Venereal Disease Control by the Federal Government, under the control of the Kenton County Board of Health, was presented by Dr. White.

Ed. Meroch then introduced the guest speaker, Wm. Keller, Associate Professor of Psychiatry of the University of Louisville, who gave a paper on Bromide Intoxication, following which there was a general discussion of the paper.

The next monthly meeting will be held at St. Elizabeth Hospital, Covington, on April 3rd.

W. V. PIERCE, Secretary.

**Fayette:** The regular meeting of the society was held on April 8th. The subject of Recent Advances in the Treatment of Peripheral Vascular Disease was presented by Woolfolk Barrow. W. T. Briggs discussed the subject "Bladder Symptoms with Normal or Apparently Normal Urine in the Female." Robert Warfield made a very complete report of a case of Portal Cirrhosis in a newborn infant. The clinical picture was not characteristic. The child died at the age of seven months and autopsy findings were presented. Careful search of all literature disclosed only one similar case.

DOUGLAS E. SCOTT, M. D., Secretary

**Madison:** The regular meeting of the Madison County Medical Society was held at the United States Trachoma Hospital Thursday evening, March 20, at 7:45 p. m.

Wilson F. Dodd, President, presided with the following members present: Ruby H. Paine, J. W. Armstrong, C. B. Marcum, K. W. Wright, Robert Sory, J. A. Mahaffey, W. F. Dodd, R. L. Rice, A. F. Cornelius, J. D. Farris, and H. Mahaffey. Visitors were: L. F. G. Hutchins and Dr. Southworth.

Max E. Blue, Madison County Health Officer acting in C. B. Billington's absence, was introduced to the Society by Robert Sory. His membership has been transferred from the Cumberland County Medical Society to the Madison County Medical Society. Max Blue discussed the program for treatment of pneumonia as advanced by the Committee on Pneumonia Control.

The minutes of the previous meeting were read by the secretary and approved.

Scientific Session: Hugh Mahaffey gave a brief synopsis of several papers presented at the Southeastern Surgical Congress.

The meeting adjourned following a short discussion.

J. H. Rutledge and M. M. Robinson have returned from vacationing in the South.

Hugh Mahaffey and Shelby G. Carr attended the Southeastern Surgical Congress in Richmond, Virginia.

ROBERT L. RICE, Secretary.

**Jefferson:** The 824th stated meeting of the Jefferson County Medical Society was held Monday evening, March 3rd, with 66 members and guests present. The meeting was called to order at 8:00 P. M.

The Secretary read the minutes of the two previous meetings, those for February 3rd, standing approved as read. The president requested that the minutes for February 17th be corrected to read, The refreshments were with the compli-

ments of a friend and they were then approved as read.

D. Y. Keith stated that the guest speaker is usually made an honorary member of the society and this was omitted at the last meeting. He made a motion that Dr. George B. Eusterman be made an honorary member. Motion seconded and passed.

The Secretary read an announcement from the Alpha Nu Chapter of the Phi Beta that the second Ephraim McDowell lecture will be March 7th with Dr. Barney Brooks, Professor of Surgery at Vanderbilt University, speaking on The Principles Involved in the Treatment of Contaminated Wounds.

The secretary read in a letter sent to C. S. Eddlemen of the Professional Service Committee by Mr. W. H. Tritt with reference to being collector for this society.

J. B. Lukins said Mr. Tritt has done some collecting of accounts his office had considered hopeless and that Mr. Tritt was absolutely honest and very reasonable.

Lee Heflin was glad to get news about a collector but the society as a whole does not employ one, it is an individual affair. He moved that the letter be filed.

The president understood that the Credit Rating Bureau does some collecting. He stated there is no definite collecting agency for the society. Motion to file this letter was seconded and passed.

W. B. Troutman, Chairman of the Program Committee, stated his committee will have another meeting in the next few days to make out a definite program for this year. It is already made out through April and there is on file sufficient material to make a good program for the coming year. The committee has considered having a Lexington Night with the Lexington Group and a Military Night on military medicine, including aviation medicine. The committee will appreciate suggestions. As a result of the questionnaire the committee sent out, it was learned that the great majority wanted more guest speakers and were two to one against more dinner meetings.

Oscar Bloch, of the Library Committee, stated they have enough money on hand to buy the books and want the members to use the library.

J. G. Sherrill moved that Dr. Bloch's committee be thanked. Motion seconded and passed.

The President stated Dr. Lutz informed him the work of the City Public Health Committee had started and they were ready for action.

Frederick H. Johanboeke was reinstated to membership.

G. P. Buettel brought up the question of the



Jefferson County Health Journal, a recent publication which should be investigated. The matter was referred to the Public Relations Committee.

The Scientific Program began at 8:25 p. m.

The President announced that stated discussors had been eliminated in the hopes of inviting more discussions.

Case Report: Nephrosis. Sam A. Overstreet. Tetanus: Analysis of Cases. (Lantern slides) Guy Aud.

Discussed by J. G. Sherrill, J. Keller Mack, G. P. Buetel, J. E. Hamilton, Dougal M. Dollar and Emil Mosny with closing remarks by the essayist. Intracranial Tumors with Case Reports Illustrating Symptoms Arising from Various Parts of the Brain. Franklin Jelsma.

Discussed by Austin Bloch, M. C. Baker, J. K. Hutcherson, John D. Campbell and Walter Dean, with closing remarks by the essayist. The meeting adjourned at 10. p. m.

W. B. SMOCK, Secretary.

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**Jefferson:** The 825th stated meeting of the Jefferson County Medical Society was held Monday evening, March 17th with 104 members and guests present. The meeting was called to order at 8:05 P. M.

The Secretary read the minutes of the previous meeting and they were approved as read.

The Secretary had two applications for employment, the first, referred by J. K. Hutcherson, for laboratory work and the second, Julia Erskine for secretarial work. Motion passed that these applications be accepted and filed.

E. L. Henderson of the Public Relations Committee read the committee's report on the Jefferson County Health Journal. The committee thinks the less agitation about this the better, that the journal will be short lived under its present setup.

Laman Gray of the Professional Service Committee reported that one hundred young people have been examined by the Neighborhood House, Louisville, at a cost of 12½c per examination. Also, approximately nine hundred young people are to be examined for the National Youth Administration at the rate of thirteen dollars per day for a full day's work. Certain members of the society have been contacted about doing this work and it is estimated that 198 examinations per week can be done. If there are others not contacted who would like to do this work, please get in touch with the committee.

Virgil Simpson of the Medical Economics Committee said the committee has not been contacted

about the National Youth Administration examinations, but that it had regarding those for the Neighborhood House. The Society thought it wise to participate in those examinations rather than encourage individuals to accept charity. The National Youth Administration did not come before this committee. The pay is inadequate but the committee thinks it is better for the members of the society to go along with these popular movements so long as the members are not asked to do pure charity. The Medical Economics of the Kentucky State Medical Association has been contacted in the past ten days with the request that the members of the state association examine Citizens Conservation Corps men for the coming year, preferably in counties in which they originate. Dr. Simpson is personally more in sympathy with the Citizens Conservation Corps work, and thinks it best to go along with the idea.

J. G. Sherrill stated that in his fifty years experience in medicine the profession has never failed to do its duty to the poor and that the people of the United States got the idea the medical profession does not have to be paid. The doctors are taxed for the privilege of practicing medicine, even if only for charity and are not appreciated by many of the men dealing out jobs in Washington. He is opposed to dictating terms of remuneration for services rendered by physicians.

M. J. Henry said from the information available two days ago it seemed an imposition upon the medical profession to work for thirteen dollars a day when a carpenter can get fifteen dollars a day and more for Saturday and Sunday. But, since charge for the examination will come out of the allotment to be given the people he thinks, like Dr. Simpson, it would be well for the society to acquiesce. He feels the society should not take any definite action one way or the other.

Inasmuch as no formal motion was made for the society to approve or disapprove Dr. Simpson made a motion that the Society pass on to the next order of business. Motion seconded and passed.

Scientific Program: 8:35 P. M.

Guest speaker: Frederick H. Falls, M. D., Professor of Obstetrics and Gynecology, University of Illinois College of Medicine, Chicago, Ill. Robert F. Monroe, President of the Louisville Obstetrical and Gynecological Society, introduced Dr. Falls who spoke on Toxemias of Late Pregnancy, illustrated with lantern slides.

At the conclusion of his address, Dr. Falls was selected to honorary membership in this Society.

W. B. SMOCK, Secretary.

**Union:** The Union County Medical Society met at the Kentucky Hotel at 6 p. m. Tuesday night, March 11th. J. W. Conway, President, called the meeting to order after a delightful meal. After a short business session and the reading of the minutes by Bruce Underwood, Secretary, E. Dargan Smith addressed the society on the subject of The Treatment of Wounds. He stressed the use of glycerine as an osmotic agent to promote local drainage and its use in communities where hospital care is not available or impractical. This method is quite new and has been originated by the essayist. It has received wide acceptance and the glycerine is so harmless that it can be used on any portion of the body and for almost any kind of infection. The results have been far in excess of any expectations. Turner Pursley of Marion was a welcome visitor. The entire society enjoyed this profitable meeting. There are no doctors from this county called to the Army.

BRUCE UNDERWOOD, Secretary.

#### BOOK REVIEWS

**BIOCHEMISTRY OF DISEASE.**—By Meyer Bodansky, Ph. D, M.D., Director of John Sealy Memorial Laboratory and Professor of Pathological Chemistry, University of Texas School of Medicine and Oscar Bodansky, Ph. D, M.D., Lecturer in Biochemistry, Graduate Division, Brooklyn College, formerly Biochemist Children's Medical Division, Bellevue Hospital, Department of Pediatrics, New York College of Medicine. The Macmillan Company, New York, 1940 (Seco d Printing). \$8.00.

The practicing physician and clinician will find this book of real value as a ready reference and easily read account of the biochemistry underlying diseases. It is designed for the clinician and set up according to clinical disease entities. The authors presume a basic knowledge of the fundamentals of biochemistry and of physiology, and confine the subject to those chemical reactions and findings which will be of aid in diagnosing and treating the patient scientifically. The book includes the latest data and scientific facts so that it may be considered in the light of a digest of the latest research and laboratory developments, which the physician can use in his every day practice. The book should have a wide appeal to the medical, surgical, obstetrical and gynecological specialist as well as to the general practitioner. There is also a section on the Biochemical Aspects of Neurologic and Psychiatric Disorders.

**CLINICAL PELLAGRA.**—By Seale Harris, M. D., Professor Emeritus of Medicine, University of Alabama, Birmingham, assisted by Seale Harris, Jr., M. D., formerly Assistant Professor of Medicine, Vanderbilt University, with

foreword by E. V. McCollum, Ph. D., Sc. D., LL.D., Professor of Biochemistry School of Hygiene and Public Health, the Johns Hopkins University, Baltimore. Illustrated. The C. V. Mosby Company, St. Louis. Publishers. Price \$7.

This book has been prepared by a close student of pellagrous patients and of the scientific contributions which have thrown light on the nature of the disease, assisted by several distinguished scientists, and presents a searching inquiry into the interaction of several agencies secondary to specific dietary deficiencies. It is simply illustrated and is a distinct contribution to medical literature.

**MODERN DERMATOLOGY AND SYPHILOLOGY.**—By S. William Becker, M. D., Associate Professor of Dermatology and Syphilology, Kuppenheimer Foundation, University of Chicago, and Maximillian E. Obermayer, M. D., Assistant Professor of Dermatology and Syphilology, Kuppenheimer Foundation, University of Chicago; 871 pages, 7" x 10" with 461 illustrations and 32 full color plates. J. B. Lippincott Company, Philadelphia, London, Montreal.

This book is an authoritative and comprehensive presentation of the newer knowledge of the diagnosis and treatment of dermatologic diseases, as well as a compact account of the history, diagnosis and treatment of syphilis. The table of contents begins with the anatomy, physiology and immunology of the skin. Dermatologic diagnosis is discussed, as well as the care of the skin and scalp. Prenatal dermatoses and toxic dermatoses are well handled. The neurodermatoses and the dermatoses due to physical agents and vascular origin are discussed at length. Those due to infections and infestations and those due to the diseases of the cutaneous appendages are excellently presented, with the treatment given in each instance.

The accompanying illustrations and color plates constitute an excellent complement to the text. It is a compact volume of both dermatology and syphilology, printed in easily readable type, and at the end of each chapter will be found references for further reading for those who wish to pursue the subject at greater length.

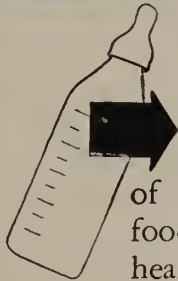
**SYNOPSIS OF OBSTETRICS.**—By Jennings C. Litzenberg, M. D., F. A. C. S., Professor Emeritus of Obstetrics and Gynecology, University of Minnesota Medical School, Minneapolis, Minnesota. The C. V. Mosby Company, St. Louis, Publishers. 1940.

The author states that in this book he has tried to place "due emphasis upon the really important considerations. The aim has been to minimize the more or less irrelevant; to evaluate the questionable; to emphasize the important; and at the same time to maintain that balance between minimum and maximum stress so necessary to develop sound judgment."





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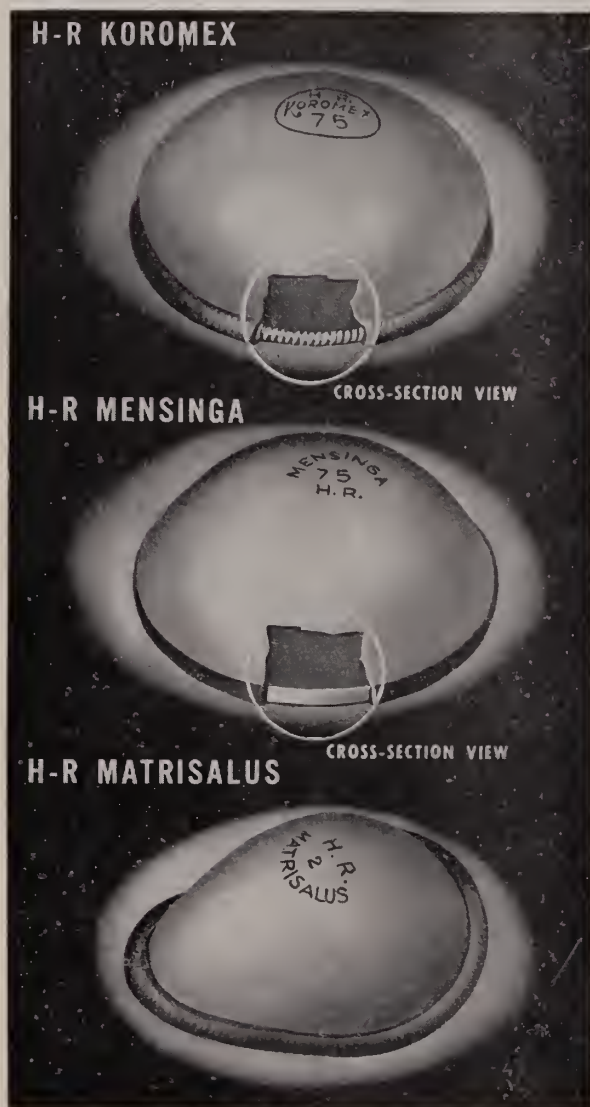
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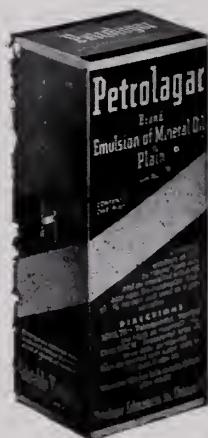
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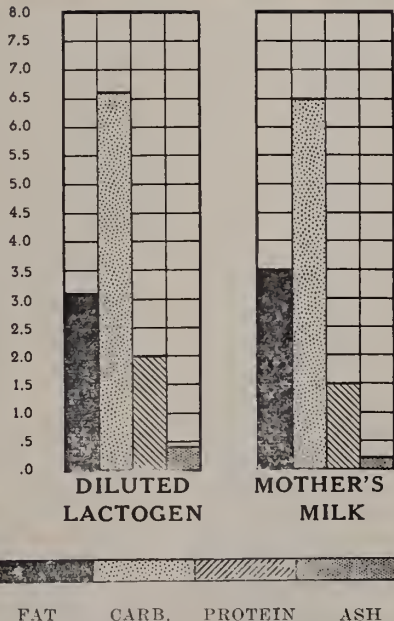
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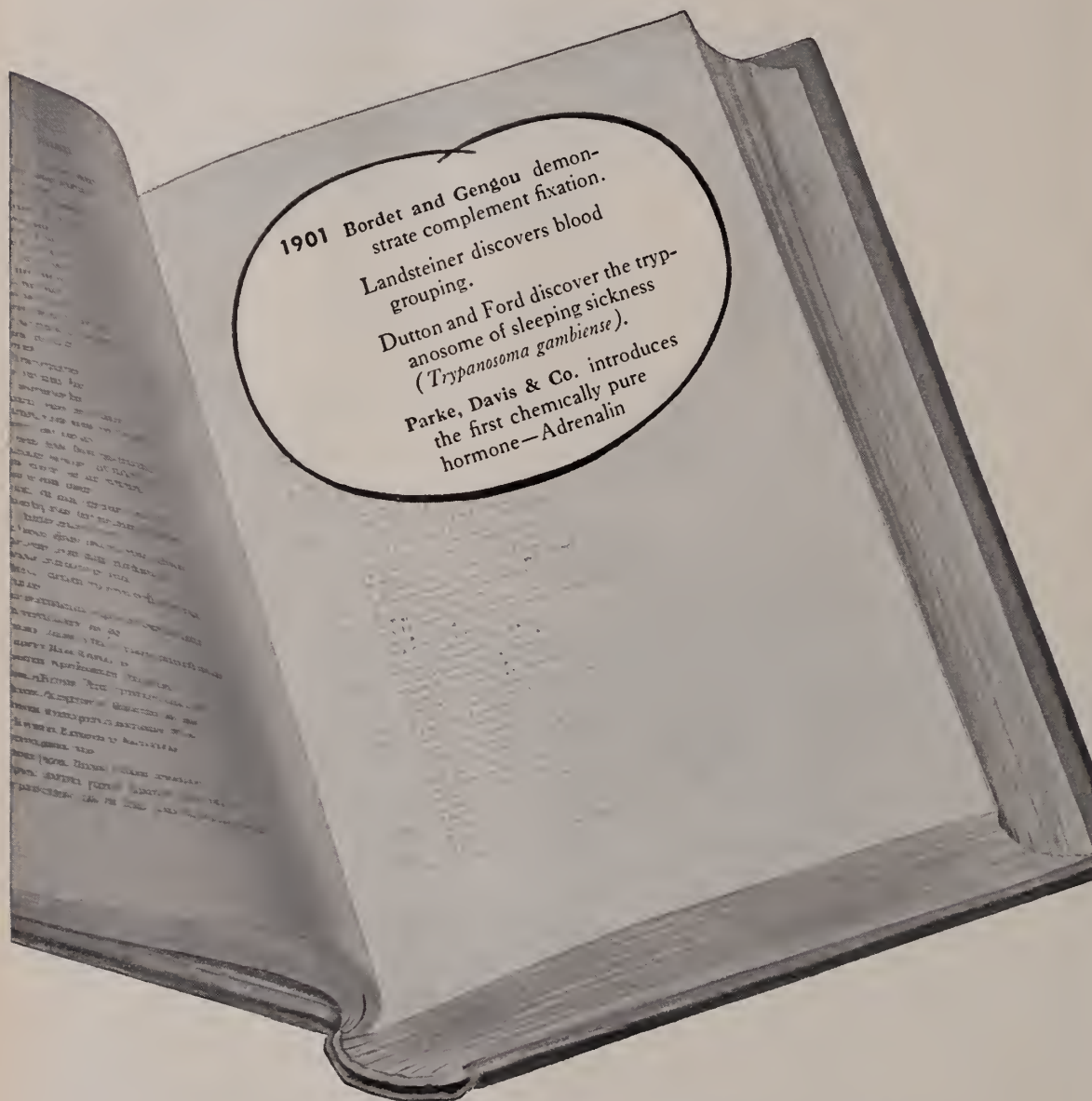
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Adair.....	Todd Jefferies.....	Columbia.....	June 4
Allen.....	A. C. Miller.....	Scottsville.....	June 25
Anderson.....	J. B. Lyen.....	Lawrenceburg.....	June 2
Ballard.....	F. H. Russell.....	Wickliffe.....	June 10
Barren.....	R. E. Hayes.....	Glasgow.....	June 18
Bath.....	H. S. Gilmore.....	Owingsville.....	June 9
Bell.....	Edward S. Wilson.....	Pineville.....	June 13
Boone.....	R. E. Ryle.....	Walton.....	June 18
Bourbon.....	B. N. Pittenger.....	Paris.....	June 19
Boyd.....	R. W. Gardner.....	Ashland.....	June 3
Boyle.....	P. C. Sanders.....	Danville.....	June 17
Bracken-Pendleton.....	W. A. McKenney.....	Falmouth.....	June 26
Breathitt.....			June 17
Breckinridge.....	John E. Kincheloe.....	Hardinsburg.....	June 12
Bullitt.....	George B. Hill.....	Mt. Washington.....	
Butler.....	D. G. Miller, Jr.....	Morgantown.....	June 4
Caldwell.....	W. L. Cash.....	Princeton.....	June 3
Calloway.....	J. A. Outland.....	Murray.....	June 5
Campbell-Kenton.....	W. V. Pierce.....	Covington.....	June 5
Carlisle.....	E. E. Smith.....	Bardwell.....	June 3
Carroll.....	H. Carl Boylen.....	Carrollton.....	
Carter.....	Don E. Wilder.....	Grayson.....	June 10
Casey.....	Wm. J. Sweeney.....	Liberty.....	June 26
Christian.....	Geo. E. Pryor.....	Hopkinsville.....	June 17
Clark.....	Robert E. Strobe.....	Winchester.....	June 20
Clay.....	L. H. Wagers.....	Manchester.....	June 10
Clinton.....	S. F. Stephenson.....	Albany.....	June 21
Crittenden.....	C. G. Moreland.....	Marion.....	June 9
Cumberland.....	W. Fayette Owsley.....	Burkesville.....	June 4
Daviess.....	T. H. Milton.....	Owensboro.....	June 10 & 24
Elliott.....	W. H. Joyner (Acting).....	Sandy Hook.....	
Estill.....	Virginia Wallace.....	Irvine.....	June 11
Fayette.....	Douglas E. Scott.....	Lexington.....	June 10
Fleming.....	Roy Orsborn.....	Flemingsburg.....	June 11
Floyd.....	Robert M. Sirkle.....	Prestonsburg.....	June 7
Franklin.....	Thomas P. Leonard.....	Frankfort.....	June 5
Fulton.....	M. W. Haws.....	Fulton.....	June 11
Gallatin.....			June 19
Garrard.....	J. E. Edwards.....	Lancaster.....	June 19
Grant.....	Lenore Patrick.....	Williamstown.....	June 18
Graves.....	H. H. Hunt.....	Mayfield.....	June 3
Grayson.....			
Green.....	S. J. Simmons.....	Greensburg.....	June 2
Greenup.....	L. C. Bate.....	Greenup.....	June 13
Hancock.....	F. M. Griffin.....	Hawesville.....	June 2
Hardin.....	D. E. McClure.....	Elizabethtown.....	June 12
Harlan.....	M. W. Howard.....	Harlan.....	June 21
Harrison.....	W. B. Moore.....	Cynthiana.....	June 2
Hart.....	Maher Speevack.....	Munfordville.....	June 3
Henderson.....	J. Leland Tanner.....	Henderson.....	June 9 & 23
Henry.....	Owen Carroll.....	New Castle.....	June 12
Hickman.....	H. E. Titsworth.....	Clinton.....	June 5
Hopkins.....	Wm. H. Garnier.....	Madisonville.....	June 12
Jackson.....	Mary T. Arnold.....	McKee.....	June 7
Jefferson.....	B. W. Smock.....	Louisville.....	June 2 & 16
Jessamine.....	J. A. VanArsdall.....	Nicholasville.....	June 19
Johnson.....	A. D. Slone.....	Paintsville.....	June 23
Knott.....			June 28
Knox.....	T. R. Davies.....	Barbourville.....	June 19
Larue.....			
Laurel.....	Oscar D. Brock.....	London.....	June 11
Lawrence.....	L. S. Hayes.....	Louisa.....	June 16
Lee.....	A. B. Hoskins.....	Beattyville.....	June 14
Leslie.....	John H. Kooser.....	Hyden.....	
Letcher.....	T. M. Perry.....	Jenkins.....	June 24
Lewis.....			June 16
Lincoln.....	Lewis J. Jones.....	Hustonville.....	June 20
Livingston.....	J. O. Nall.....	Smithland.....	
Logan.....	E. M. Thompson.....	Russellville.....	June 4
Lyon.....	H. H. Woodson.....	Eddyville.....	June 3
McCracken.....	Leon Higdon.....	Paducah.....	June 25
McCreary.....	R. M. Smith.....	Stearns.....	June 2
McLean.....	Allen R. Will.....	Calhoun.....	June 12
Madison.....	Robert L. Rice.....	Richmond.....	June 19
Magoffin.....			
Marion.....	W. E. Oldham.....	Lebanon.....	June 24
Marshall.....	S. L. Henson.....	Benton.....	June 18
Martin.....			

COUNTY	SECRETARY	RESIDENCE	DATE
Mason.....	C. W. Christine.....	Maysville.....	June 11
Meade.....	S. H. Stith.....	Brandenburg.....	June 26
Menifee.....	E. T. Riley.....	Frenchburg.....	
Mercer.....	J. Tom Price.....	Harrodsburg.....	June 10
Metcalf.....	E. S. Dunham.....	Edmonton.....	June 3
Monroe.....	George E. Bushong.....	Tompkinsville.....	
Montgomery.....	D. H. Bush.....	Mt. Sterling.....	June 10
Morgan.....			
Muhlenberg.....	E. L. Gates.....	Greenville.....	June 10
Nelson.....	R. H. Greenwell.....	Bardstown.....	June 18
Nichols.....	T. P. Scott.....	Carlisle.....	June 16
Ohio.....	Oscar Allen.....	McHenry.....	June 4
Oldham.....			June 3
Owen.....	K. S. McBee.....	Owenton.....	June 5
Owsley.....	W. H. Gibson.....	Booneville.....	June 2
Perry.....	D. D. Turner.....	Hazard.....	June 9
Pike.....	F. H. Hodges.....	Pikeville.....	June 3
Powell.....	I. W. Johnson.....	Stanton.....	June 2
Pulaski.....	M. C. Spradlin.....	Somerset.....	June 12
Robertson.....			
Rockcastle.....	Lee Chestnut.....	Mt. Vernon.....	June 6
Rowan.....	A. W. Adkins.....	Morehead.....	June 9
Russell.....	J. R. Popplewell.....	Jamestown.....	June 9
Scott.....	A. Y. Covington.....	Georgetown.....	June 5
Shelby.....	A. D. Doak.....	Shelbyville.....	June 19
Simpson.....	L. R. Wilson.....	Franklin.....	June 10
Spencer.....			
Taylor.....	W. B. Atkinson.....	Campbellsville.....	June 5
Todd.....	B. E. Boone, Jr.....	Elkton.....	June 4
Trigg.....	N. C. Magraw.....	Cadiz.....	June 25
Trimble.....			
Union.....	Bruce Underwood.....	Morganfield.....	June 3
Warren-Edmonson.....	W. O. Carson.....	Bowling Green.....	June 11
Washington.....	J. H. Hopper.....	Willisburg.....	June 18
Wayne.....	Frank L. Duncan.....	Monticello.....	
Webster.....	C. M. Smith.....	Dixon.....	June 27
Whitley.....	C. A. Moss.....	Williamsburg.....	
Wolfe.....			June 2
Woodford.....	Geo. H. Gregory.....	Versailles.....	June 5

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Med. Vol. 35, No. 11,590; Arch. of Otolaryngology, Mar. 1936, Vol. 23, No. 3,306

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# RESEARCH

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# KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

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VOL. 39, No. 6

BOWLING GREEN, KY.

JUNE, 1941

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## PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION

The American Medical Association advocates:

1. The establishment of an agency of federal government under which shall be coordinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American System of democracy.

## EDITORIALS

## OUR NEW PRESIDENT

Dr. William Edward Gary, Hopkinsville, has been named President by the Council to succeed the late Dr. Austin Bell. Dr. Gary has been an active member of the county and state society, rarely missing a meeting, and the Association is fortunate in having such a worthy successor of our beloved Dr. Bell.

Dr. Gary was graduated from the University of Louisville Medical School in 1908. After several years as laboratory chief of the Louisville Board of Health, he went to Hopkinsville, where he engaged in radiology and laboratory work.

## THE PROGRAM

The program for the 1941 session of the Kentucky State Medical Association is reported by Dr. James H. Pritchett as rapidly nearing completion. Dr. Pritchett has received letters and suggestions from physicians in all parts of the state outlining topics for consideration. It is interesting to note that the essayists will be distributed so that they will come from every part of the state. So much interest has developed in the Round Tables that arrangements have been made for four this year.

Part of the program will be devoted to Selective Service problems; the other subjects will include Military Medicine, Dental Surgery and other subjects of special and general interest.

Dr. W. O. Johnson, Chairman of the Committee on Scientific Exhibits, is arranging for an outstanding and unique program which will be worthy of study throughout the session. This session promises to be the best and the largest that we have ever had.

We need the cooperation of every physician in Kentucky and Dr. Pritchett would appreciate any additional suggestions at a very early date as he expects to have the program completed by the first of June.

## DISHONEST CHARITY

In a recent issue of this Journal we called the attention of the profession to an alleged unholy alliance that has been reported to exist between some hospitals and some of the undertakers in the state. This matter had been called to our attention unofficially and inadvertently the names of

two or three counties were mentioned. Among these, the name of Bell County was listed.

The splendid physicians who compose the Bell County Medical Society write that no such condition prevails in their county, and we are very happy to make this statement and to apologize to the Bell County Medical Society. It was of equal interest that we received letters from a number of other counties who were not mentioned. We would like to call the attention of the profession again to the urgent necessity that there should be no arrangements about such a matter by which there should be favoritism, if such should exist, between hospitals and undertaking establishments. We want no member of our profession connected in any way with such an arrangement suggesting a business understanding or favoritism.

## REGISTRATION OF NURSES

Tell your nurses nothing in the Civil Defense Program in the present emergency is more important than having available enough legally qualified nurses. The State Board of Nurse Examiners is fully aware of this situation and is taking special steps to provide for this emergency by making every trained nurse in Kentucky available for duty at home or elsewhere. Many of our nurses married and dropped their registration. For these and all other qualified, unregistered, trained nurses, the Board will have a special examination at the Henry Clay Hotel in Louisville, on June 23 and 24. The questions used will be the essay type as these nurses are familiar with them. In addition, the board will allow each applicant some credit for her experience.

There has been some agitation during the recent session of the Legislature for the passage of a bill for the special registration for such nurses. The Board of Nurse Examiners is making this unwise procedure unnecessary. We are writing this editorial so that physicians will call the attention of each nurse, whether registered or not, to this fine action of the Nurse Board and secure the registration of every possible unregistered, trained nurse. The fee for the examination will be \$10.00 and the application should be sent to Miss Honor Murphy, Secretary, Henry Clay Hotel, Louisville, Kentucky.



## FINANCIAL DILEMMA OF KENTUCKY'S ONLY MEDICAL SCHOOL

The University of Louisville School of Medicine is the second oldest medical school west of the Alleghenies, and the only medical school in Kentucky. Many of its alumni have attained national and international prominence. Many illustrious teachers who did pioneer work in American medicine were attracted to Louisville, including Daniel Drake, Samuel D. Gross, Benjamin Silliman and Austin Flint. The Medical School took an active part in the formation of the Association of American Medical Colleges, and has always supported its aims to elevate the standards of medical education. If an illustrious history bears any weight, the institution should be foremost among medical schools in America today.

However, the dark side of the picture is that the school has been running on a very close margin, financially speaking, for some time. It does not have an endowment. An excellent faculty, though too small, has been handicapped in its teaching endeavors for this reason. Especially in research has this stringency been felt. The number of investigative problems completed has been small indeed when compared with more wealthy schools and the hindrance has risen entirely from pecuniary inadequacy.

The situation was rendered acute when it was announced a short while ago that the budget for next year would be cut \$3,300, this despite a prospective increase in tax revenue occasioned by the influx of population attracted by the many defense industries located in Louisville.

Not knowing where the prospective shortage was to come from, Dean John Walker Moore appealed to Alpha Omega Alpha honorary medical service organization to support a plan to raise the sum as an emergency measure. The society immediately pledged its entire financial resources, as well as the active efforts of all of its members. It was, however, also decided that an unusual opportunity had presented itself to go farther than this immediate goal, and that a permanent Endowment Fund should be established. If the effort could be attended by even partially satisfactory results the most important step in restoring the medical school to her rightful preeminence would have been taken.

Hence, a short time ago a plea was broad-

cast to some 5,000 medical school alumni to participate in the "Living Endowment" plan. This is the first time any such request has ever been made. Here is a method whereby "small annual contributions are equivalent to adding millions to endowment." Only the interest is paid annually on some pledged amount, such as 4% on a \$1,000 pledge, which would mean \$40 yearly.

No sum is too large or too small to contribute to this worthy cause. It is hoped that the annual donations of its alumni will be proportionate to their desire to further the reputation and well-being of their Alma Mater.

The present senior class backed the drive with a substantial collective gift, which was supplemented by individual pledges. The various medical Fraternal organizations have contributed generously. If the financial support of the alumni parallels their income as closely as was the case with these students, the plan is assured of success. Will you do your part?

---

CLAUDE THOMAS WOLFE

1883-1941

On April ninth, nineteen hundred forty-one, Doctor Claude Thomas Wolfe, one of the outstanding eye and ear specialists and prominent citizens of Louisville went to his eternal rest. Apparently in perfect health and in his usual jovial mood when he retired on April eighth, he passed away in sleep during the night. The shock of his sudden, unexpected passing and the grief of the stricken family were shared by his associates in medicine and his large number of friends and patients.

Doctor Wolfe, son of Doctor Z. C. and Martha Wolfe, was born in Corydon, Ind., in 1883. His early education was obtained in his home town; his medical education in Louisville, where he graduated from the medical department of the University of Louisville in 1907. After spending some time at the Manhattan Eye and Ear Infirmary of New York and Wills Hospital of Philadelphia, for elementary training in his chosen specialty, he returned to his home where he practiced general medicine for a year before he entered the Chicago Eye and Ear Hospital to serve a year as House Surgeon. At the termination of this service, in 1911, he established himself in Louisville as an Eye and Ear Specialist, which marked the beginning of a highly successful career. He immediately attached himself to the Department of Ophthalmol-

ogy of his alma mater as assistant, from which he soon rose to the position of instructor.

Doctor Wolfe was a forceful and efficient teacher who executed his duties in a conscientious manner and who always found time for his students even after his private practice had reached considerable proportions. His ability to express his thoughts lucidly and entertainingly was his chief asset as a medical teacher and lent much to the high regard in which his students held him and to his popularity with them. His clinical patients also held him in high esteem for he made no distinction in the service offered his private patients and that given the many attending the free clinics of the City Hospital. Doctor Wolfe was a skillful operator and keen diagnostician. He was especially interested in the relation between diseases of the eye and ear and constitutional affections and gave much time and effort to impressing such on his classes.

During the first World War, Doctor Wolfe's activities in Louisville were interrupted for two years when he served as Captain in the army at Fort Oglethorpe, Ga. Upon his return from service he was promoted in the medical school to an Adjunct Professorship and in 1923 he became First Assistant Clinical Professor. In 1927, upon the retirement of Doctor Adolph Pfingst, he was elected his successor as Professor of Ophthalmology and Chief of the Eye Clinic, positions he held to the end of his life.

Doctor Wolfe was active in attendance at medical society meetings and held membership in most of the national societies devoted to the study of otology and ophthalmology. He was past president of the Kentucky State Eye and Ear and Louisville Eye and Ear Societies. He was a Mason, and a member of the Pendennis Club, Louisville Country Club, and the Juniper Club.

Doctor Wolfe enjoyed an enormous private practice. His patients were most devoted and loyal to him, many of whom became converted from patient to friend by his cheerful and cordial personality.

The Wolfes led an ideally happy domestic life. They were cordial hosts and nothing gave them more pleasure than the entertainment of their friends in their spacious home. Doctor Wolfe had just recently experienced one of the greatest joys of his life when he welcomed his son, Doctor Wil-

liam Wolfe, into his office as associate in Otology and Laryngology.

A firm believer in combining work with play, as essential to good health and efficient work, Doctor Wolfe interested himself in all sports and was himself a golf player of no mean ability. In recent years he and Mrs. Wolfe had developed a fondness for travel and they had, just a few months ago, enjoyed a Caribbean trip and a visit in Nassau.

ADOLPH O. PFINGST, M. D.

#### POSTGRADUATE COURSE IN OBSTETRICS

The Illinois State Department of Public Health and the United States Children's Bureau, Department of Labor, are sponsoring ten 4-week courses in obstetrics at the Chicago Lying-In Hospital. This course is to be given during the fiscal year 1941-1942.

In the year 1941, the dates of the courses are as follows: June 30 to July 26; July 28 to August 23; August 25 to September 20; September 22 to October 18; October 20 to November 15.

Only a limited number of physicians will be accepted for each course. The only cost to the individual is for room and board and a fee of \$25.00 (\$10.00 of which is refunded at the completion of the course).

Topics covered in lectures and demonstrations are: Surgical anatomy of the abdomen and pelvis; pelvic types and abnormalities. Normal histology and histopathology of the female genital tract. Obstetric endocrinology; biologic tests. Prenatal and preconceptional care. Diagnosis of pregnancy, fetal attitudes, presentation and position and mechanism of labor OA. Mechanism of labor OP, deflexion attitudes, breech and transverse presentations in normal and contracted pelvis. Operative obstetrics; forceps, rotations, craniotomy, version and extraction, cesarean section. Induction of labor, dystocia, and problems of the third stage. Obstetric hemorrhage in first half of pregnancy (ectopic, mole, abortion); second half of pregnancy (placenta previa, abruptio placenta, ruptured uterus). The toxemias of pregnancy. Blood transfusions and other parenteral fluid technics. Laboratory diagnosis and chemotherapy in the prenatal and postpartum periods. Medical complications of pregnancy. Obstetric analgesia and anesthesia.

Applications and inquiries should be addressed to: Post Graduate Course, Department of Obstetrics and Gynecology, 5848 Drexel Avenue, Chicago, Illinois.



## MR. GREENE RETIRES

Every physician in the United States knows about the W. B. Saunders Company, Publishers, in Philadelphia. One of the great minds and souls behind that organization, R. H. Greene, is retiring after many years of service. Of course, Mr. Greene will continue his interest in medical literary matters.

Few men have made a greater contribution to the progress of the science of medicine.

## N. Y. A. HEALTH EXAMINATIONS

The Committee on Medical Economics, of which Dr. Virgil E. Simpson is chairman, has unanimously approved the proposal of the National Youth Administration of Kentucky that the State Medical Association cooperate in planning health examinations for National Youth Administration project employees. It is believed that a competent physical appraisal followed by correction of handicapping defects will help not only to classify the youth for employment, but will also aid in improving his physical condition.

It is the opinion of the Committee that this proposal is a type of Part-pay Plan which has been adopted by many county societies in the various states to assist low income groups. Since the objectives of this proposal appear worthwhile, the Committee has recommended that the matter be presented to the secretaries of the constituent county societies in the counties in which youth are employed with the suggestion that each secretary work out with his local profession a plan for making health examinations for National Youth Administration project employees.

## VENEREAL DISEASE BULLETIN

The United States Public Health Service issues a monthly publication devoted exclusively to venereal diseases. The purpose of the Service in issuing this Bulletin is to provide, in a condensed form, a monthly summary of the latest scientific developments in the diagnosis, treatment and control of syphilis and gonorrhea. More than 300 American and foreign journals are reviewed and abstracts made of articles dealing with laboratory, pathological and clinical work in the field of venereal diseases. This Bulletin has a wide distribution among the medical profession throughout the United States, and so is proving extremely useful in enabling practicing physicians to keep abreast of development in venereal disease work. The cost of the publication is fifty cents a year, payable in advance to the Superintendent of Public Documents, Washington, D. C.

## SCIENTIFIC EDITORIAL

## THE CLINICAL PROBLEMS OF SENILE CATARACT

As most cases of senile cataract are brought to light by the oculist in the course of a routine examination of the eyes, the problem of guiding those afflicted with this quite frequent condition falls to the lot of the eye physician and marks the beginning of a protracted period of observation and treatment. The discovery of lens opacities in a non suspecting patient naturally brings up the question regarding the advisability of discussing frankly with him the condition of his eyes and its significance. Actuated by the insidious development of senile cataract and the trying ordeal of awaiting the time of anticipated surgical treatment, it has been the policy of most physicians in the past to accept the humane alternative of withholding from the patient, as long as possible, a disclosure of his condition, in the meantime compensating for the altered refraction coincident to flattening of the lenses, with an occasional change of glasses to insure physical comfort and peace of mind. Such discreet management would seem justifiable under exceptional circumstances as applied to individuals in whom some co-existing serious systemic affection would prohibit surgical interference; to highly nervous subjects unable to accept gracefully the knowledge of the condition of their eyes; or to those of extreme age and unlikely to live to realize the seriousness of their optical defect.

However, in dealing with the average individual such well intended deception no longer meets with the approbation of the conservative oculist who acts on the premise that the individual is best served by a frank disclosure of existing conditions. The adoption of such alternative would offer the attending physician the opportunity to enlighten his patient regarding the significance of incipient cataract and incidentally to correct the erroneous impression, so prevalent among lay people, that those developing cataract are doomed to eventual permanent blindness. It would also present the opportunity to inform him that cataract is not a disease but a mere opacity of the lens amenable to surgical treatment and that it represents the least serious of all eye conditions associated with loss of vision. Further solace may be offered in the assurance that it no longer is essential to go through a trying period awaiting "ripening" and coincident blindness before extraction of the lenses may be considered, as the modern method of re-

removal of the lens in capsule has made it possible for the patient to remain employed right up to the day of the contemplated operation. Such assurance never fails to sway the patient from a state of uncertainty and worry to one of sanguine hopefulness. The most opportune time to consider the operative steps appears to be when the vision of the best eye has become inadequate to meet the demands of the subject's occupation.

After the operation has been decided on, the question arises, in the bilateral cases, whether one or both eyes should be approached. Undoubtedly two functioning eyes serve the purpose of satisfactory vision better than one, just as two hands are of greater service than one, yet it is not uncommon to have individuals reject the suggestion of having the second eye operated after a successful outcome of the operation of the first one. By some this decision is motivated by the additional expense incurred, the inconvenience of a longer stay at the infirmary and the coincident mental and physical stress. Others are influenced by the unfounded fear of losing one or both eyes by subjecting the second one to surgery.

When the bilateral procedure is the patient's preference, it is common practice to operate first the eye with the most defective vision, postponing the other to an indefinite future. To avoid a second lay off from work and another visit to the infirmary the plan of operating the second eye on the eighth or tenth day of convalescence from the first operation makes an economic appeal to some. However, it has been the observation of many surgeons, including the writer, that the mental ordeal of undergoing a second operation so soon after the first, with the physical discomfort of another period in bed with bandaged eyes, is usually not borne well and incidentally tends to bring about a more restless, willful and less co-operative patient during convalescence, and therefore is given consideration only in exceptional instances.

Upon casual thought the removal of both lenses at one session would, for obvious reasons, suggest itself and in fact such course is advocated by a few prominent ophthalmologists in this country and abroad. However, the bare possibility of unforeseen occurrences, such as infection, intraocular hemorrhage or injury occurring at the time of the operation or during

the post operative care, or the development of a constitutional infectious disease and the possibility of intrinsic ocular infection and the loss of one or both eyes are reasons sufficient to influence the conservative surgeon to disapprove simultaneous operation of both eyes.

One of the foremost problems which has beset the ophthalmologist during the many years in which surgical removal of cataract has been practiced, applies to the management of secondary membranes which so frequently followed the removal of the lens and which lay people interpret as a "return of the cataract." As these secondary membranes obstruct vision to a greater or less degree their presence necessitated one or sometimes several discission or "needling" operations. They have been the source of discouragement on the part of the patient and, on account of the possible complications attending the operation, have caused the surgeon many anxious moments. By the removal of the lens in capsule, as is now largely practiced, this former bugbear of ophthalmic surgery has been eliminated, the procedure proving one of the most notable advanced in operative technique and a boon to surgeon and patient alike.

The marked advance in the manufacture of glasses must also be given credit for its part in solving an important problem of the welfare of the victims of cataract. It has been but a few years ago that the individual with aphacic eyes was apparently more comfortable in the use of separate spectacles for near and far use, presumably on account of the confusion occasioned by the old style bifocal lenses. However, at present, since the introduction of the one piece bifocal which has eliminated the aberrations of light and the sudden break in vision at the line of division of the upper and lower refractive index, it is the exception to find those unable to adapt themselves to their use and secure satisfactory vision.

As the various problems concerning cataract are being solved through improved surgical technique and general management of these cases, making it possible to secure useful vision and to do so at the moment of necessity, a change has been brought about in the attitude of people at large toward senile cataract and its treatment.

ADOLPH O. PFINGST.



## ORIGINAL ARTICLES

## INTRACRANIAL TUMORS

FRANKLIN JELSMA, M. S., M. D.

Louisville

Problems associated with brain tumors today are greatly different from those two decades ago. In the past it was necessary to do in regard to the surgery of brain tumors as Billroth and his contemporaries did in regard to ovariectomy. Billroth wrote to Czerny, a student of his, in 1878, that of three ovariectomies performed, two had died, but he was certain that his fundamental principles were right and he would succeed. The result of such a determination is manifested by the triumphs of present day pelvic surgery.

So it has been with brain tumors. By the continued attack upon the pathology, and as the result of the observations afforded, more and more has been learned about the surgical technique. From the technical standpoint, procedures of neurosurgery have been pretty well standardized. The endotherm, suction, silver clips, and various instruments, along with certain standard operative exposures, have made operative procedures comparatively safe.

It is now possible with the facilities available to attack a tumor in any part of the brain and expect a reasonable mortality rate. In addition to the improved surgical technique it has been possible as the result of study of types of brain tumor in certain large series of cases to understand the characteristic of the individual tumor. From the age of the patient, the case history, and location, it is possible to determine the histological type of some tumors before operation. In some of the more malignant types, more conservative measures have been practiced. This is particularly so in a very malignant tumor which occurs most frequently in the vital area of the medulla and known as the medulloblastoma.

From the reports of various clinics it is noted that conservatism in some hands has not produced the best results and as a consequence has been conducive to radical measures. On the other hand, in some clinics, radicalism has given way to conservatism because of the unfavorable results. Further differentiation in regard to the handling of the individual tumor ac-

cording to its type will give better end results.

Equally important, more has been learned about the physiology of the brain. While the neurosurgeons and neuropathologists were studying the types and nature of tumors, and the technique for removal of the tumors, the physiologists were busy taking advantage of the opportunity afforded to determine more about the functions of the brain. Extensive sympathetic representation in the brain has been discovered as well as some parasympathetic centralization. There has been a revamping of the motor cortical areas. Many pathways have been changed. Problems of mental impairment, emotional disturbances, and personality changes are being studied and unraveled clinically.

Much progress has been made by those directly interested in the diseases of the central nervous system. Much more can be accomplished especially for the individual patient by the early recognition of brain tumors. The general profession may play a very important part in the recognition of these tumors by being on the alert for the early symptoms.

There are many tumors that are obscure because of their location. Some of them are obscure because of lack of information about the patient or lack of realization of what the patient's symptoms may represent. Regardless of location now it is usually possible to demonstrate the presence or absence of a tumor with thorough neurologic studies, and by the other accessory studies such as spinal fluid examination, air insufflation, and electro-encephalography.

I believe a great advance can be made if all brain tumor suspects are given an immediate and thorough study, rather than to observe further developments. Also the early symptoms of tumors should be given more careful consideration.

The usual statement that headache, nausea and vomiting, and visual disturbances are symptoms of brain tumor should be changed to state that they are symptoms of increased intracranial pressure. Of course increased intracranial pressure is often the result of intracranial tumors, yet many brain tumors do not produce increased intracranial pressure of any consequence, particularly early.

A few generalizations in regard to symptomatology may be of value. Motor changes, such as twitching of the hand or foot, or even convulsions, or weakness of the arms or legs occur early in around

37 per cent\* of brain tumors. These disturbances occur usually before any other signs develop, so it is important to suspect any convulsion as being associated with brain tumors.

Sensory changes may occur almost as frequently. These are manifested by numbness, tingling or burning sensations.

Disturbance in gait is one of the common early signs of intracranial neoplasm. It may be due to weakness of one or both of the lower extremities, or the result of a cerebellar disturbance. Visual changes often present themselves early by diplopia, or more commonly by loss of visual acuity or a field defect.

A prolonged headache which cannot be accounted for is to be considered due to an intracranial lesion until proved otherwise. Disturbance of smell and personality changes are suggestive of frontal lobe tumor. Tinnitus or ringing in the ears with gradual loss of hearing and headache, occurs in tumors located in the region of the eighth nerve in the posterior fossa. Changes in libido, disturbance in the menstrual cycle with marked loss or gain of weight occur in lesions of the pituitary gland or neighborhood. Visual changes develop later.

In order to better illustrate the symptoms in various parts of the brain, I wish to include the report of cases with tumors located in the frontal, temporal, parietal and occipital lobes, as well as tumors located in the region of the base and in the posterior fossa.

#### CASE REPORTS

Case I: Left Frontal Lobe Meningioma, Operation: M. G., female, white, age 55, was first seen June 19, 1938, complaining of a severe frontal headache. This headache had been noticed to a less degree off and on for three years. She had noticed a disturbance in taste and smell for three weeks. Reading was almost impossible because of blurring of vision during the past two weeks. Projectile vomiting had been present for one week. The left foot seemed clumsy during the last few days. There was localized pain in the left temporal region, gradually increasing for three days. Dizziness had confined her to bed for one week. There was a definite mental apathy and drowsiness which had been noticed by her relatives for the past six months. One year ago her tonsils had been removed because of persistent headaches.

Neurologic examination showed a dis-

oriented, drowsy, semi-rational, white, female, apparently suffering considerable headache. It was difficult to contact the patient. There was a definite photophobia. There was tenderness on pressure over the left temporal sphenoidal area. There were three diopters choking of both disks. Almost complete motor aphasia was present. There was a partial anosmia on the left.

The laboratory examinations were not remarkable except for 420 mm. spinal fluid pressure and a very definite erosion of the left sphenoid wing.

Ventriculograms on June 23, 1938, showed a shift of the third ventricle to the right. On the same day, a left sphenoidal wing meningioma was removed. This extended well up into the frontal fossa. Convalescence was normal and the patient obtained a complete recovery.

Drowsiness, mental apathy, disturbance in visual acuity, blurring of vision, impairment of taste and smell, all would indicate a frontal lobe disturbance. A mental change had been noticed for six months. Motor disturbances of the left foot would ordinarily lead one to suspect a right sided lesion. In this case apparently it was due to contralateral pressure at the incisura of the tentorium due to a shift of the brain stem.

Case II: Left Temporal Glioma (Astroblastoma), Malignant, Operation: L. C., female, white, age 54, was first admitted August 25, 1938. She was complaining of confusion, slight motor aphasia of an intermittent type, which was first noticed in November, 1937. One month later she became very dizzy and unsteady, but this passed away and recurred at varying intervals. Hallucinations of taste and smell gradually became more prominent, beginning shortly after the onset of her symptoms and continuing up until the day of admission. She had noted a definite impairment of hearing for the past six months.

Examination showed a drowsy individual. She had not vomited but had been nauseated. Motor aphasia was quite noticeable. She was able to write and often resorted to writing rather than talking. (Patient was right handed.) Smell was impaired on the left side about 50 per cent. There was one diopter choking of both disks.

The blood and urinalysis were not remarkable. Spinal fluid pressure was 170 mm. of spinal fluid, and the analysis of the fluid was negative.



On August 30, 1938, a ventriculogram was performed. It showed a mild dilatation of both lateral ventricles with a slight deformity of the left lateral ventricle. There was no noticeable displacement of the calcified pineal gland. On the same day, a left temporal flap was turned and an astroblastoma removed from the temporal lobe.

Convalescence was normal and the patient recovered from the symptoms of which she complained.

In this case pressure was not markedly increased and played very little part in the production of the symptoms. The impairment of hearing was probably central in origin, due to disturbance of the temporal lobe. Aphasia likewise was the result of anterior extension of pressure, but apparently not due to destruction of the motor speech center. The temporal lobes are practically a silent area and show very little evidence of the presence of a lesion except by producing symptoms resulting from disturbances in circulation of adjacent areas.

Case III: Parieto-Occipital Lobe Tumor, Glioma, Operation: G. E. H., male, white, age 30, was admitted to the hospital June 7, 1937. The previous winter the patient first noticed some disturbances in visual acuity. Headache had been quite pronounced since January, 1937. Vomiting soon followed. There were periods of a week or ten days in which he would feel somewhat relieved and could carry on his work. In April and May, 1937, patient became so weak that he was unable to walk. I first saw him on June 6, 1937. During the four weeks previously, they had been taking him to a neighboring town for daily sinus treatments. Three months before, his tonsils had been removed.

At the time of examination, there was found a well developed, extremely emaciated, male, white adult, 30 years of age, with blood pressure of 140 systolic and 80 diastolic. Both disks were markedly choked, with hemorrhages and exudate in abundance. Aside from the increased intracranial pressure no other positive findings were noted until the visual fields were taken. A definite left homonymous hemianopsia was found and the portion of the field remaining was greatly constricted. This placed the lesion somewhere behind the chiasm on the right side. A right occipital-parietal flap was turned and a deep tumor found in the right parieto-occipital lobe. The tumor was removed. The patient made an uneventful recovery but the vis-

ual field defect still remained. His other symptoms cleared up.

This case illustrates an extremely far-advanced brain tumor that had produced almost complete and permanent destruction of the visual mechanism as a result of direct invasion and increased intracranial pressure. His headache and suffering must have been terrific. In this case there was also a left homonymous hemianopsia which likely presented earlier. It frequently occurs with lesions of the occipital lobe.

Case IV: Parasellar Glioma, Malignant, Operation: M. S., female, white, age 8, was admitted to the hospital March 2, 1939, complaining of a disturbance in vision first noted by a school doctor one and a half years before. Glasses had been fitted but vision was not materially improved. During the past six months there had been a progressive loss of vision. Headaches appeared in the frontal and bitemporal regions. Nausea and vomiting occurred in the past three weeks.

One of the primary reasons why the attending physician suspected an intracranial lesion was the fact that she had a very precocious secondary sex development which had made its appearance during the last three months.

On examination, the blood pressure was found to be 122 systolic and 80 diastolic. The right disk was blurred. The left was atrophic and blanched. There was no form perception with the left eye. There was a temporal constriction of about 50 per cent in the right field. The reflexes were normal. There was a moderate amount of pubic hair. Roentgenograms showed an increase in size of the sella.

On March 15, 1939, a left frontal flap was turned and a glioma was removed from the left parasellar region. This glioma extended up onto the left optic nerve and it was noted that the nerve was practically destroyed.

Convalescence was normal and up to the present time she has been able to attend school and carry on her usual activities. Vision has improved in the right eye, but was lost in the left eye.

Case V: Hemorrhagic Cyst, Chromophobic Adenoma of The Pituitary, Operation, Good Recovery: N. T. P., male, white, age 48, was admitted to the hospital September 26, 1938, complaining of headache which developed after injury to the right frontal region in April, 1938. While working, he struck his head against a sharp corner of a plank. Vision had gradually become impaired so that for the past three

months he had not been able to see anything with his right eye except light. The right eye had been turned outward for ten days. There had been no nausea or vomiting.

On examination nothing remarkable was found in regard to his general condition. From a neurologic standpoint it was noted that the right disk was pale, there was weakness of the third nerve on the right side, and the perimetric fields were normal on the left, whereas on the right he could not see the test object. There was a 90 per cent impairment of smell on the right side. The x-rays revealed an enlarged sella turcica.

On October 1, 1938, a right frontal flap was turned and a large hemorrhagic cyst was found extending out in front of the optic chiasm, which, when opened, was found to include the pituitary fossa. The blood was removed. It was noted that the hemorrhage had occurred from a pituitary tumor. The tumor was removed and proved to be a chromophobic adenoma, a benign lesion.

Vision returned to practically normal so that the patient was able to carry on his hunting, and he was a good quail shot, in as good a manner as before injury.

Case VI: Pituitary Adenoma, Acromegaly, Operation: H. K. S., male, white, age 48, was first seen February 12, 1937. At that time, he complained of headaches that had occurred off and on since 1930. Since 1927, he had noticed a gradual change in the contour of his face, enlargement of his hands and feet, increase in bodily stature and weight. In 1927, at 38 years of age, his weight was 125 pounds. In February, 1937, his weight was 249 pounds. In 1927, he wore a number 5 shoe; in 1937, he wore a number 11. In February, 1936, he began drinking large quantities of water. Apparently there had been no craving for sweets. In June, 1936, he became impotent. In June 1936, his vision had become reduced in the left eye to a point where he could not read. The loss of vision as described by the patient was so acute in February, 1937, that he could not carry on his work as an insurance man.

Examination at this time showed a large man with typical acromegalic features and bodily structure. The chin was large, the brows were prominent, the nose was large, there were three longitudinal furrows through the scalp, each about one-half inch deep. The hair was coarse and very abundant over the body. There were small papillae scattered over the extremities and

body. The hands and feet were extremely large. The cranial nerves were negative except for paleness of the medial half of the right disk, and in the left eye the entire disk was very pale. The field of vision of the left eye could not be taken. Only light perception was present. On the right side there was a loss of the entire temporal field with a constricted nasal field.

This patient was operated on February 19, 1937, through a left frontal flap. A pituitary adenoma was found impinging upon the chiasm, more on the left side than on the right. It was removed. Convalescence was uneventful. The visual acuity and fields showed a marked improvement even while the patient was convalescing. Since, he has developed a good field in the right eye, constricted field in the left eye, but he is able to read and carry on his regular duties.

Case VIII: Cerebellar-Pontine Angle Syndrome, Right Acoustic Neuroma, Operation, Removal: A. S., female, white, age 17, was admitted to the hospital March 22, 1939, complaining of headaches for the past three months. Before this, during the past five or six years she was aware of a gradual loss of hearing in the right ear. Chimes, roaring, and ringing in the right ear had been noticed intermittently, but progressively more frequent in the past four years. Pain in the right occipital region had been a prominent symptom for the past three weeks. Dizziness, unsteadiness and difficulty in controlling the upper and lower extremities had been noticed occasionally. Neurologic examination showed a well developed, well nourished young lady. The blood pressure was 112 systolic and 80 diastolic. There was choking of both disks, four diopters on the right side, and two diopters on the left side, with some hemorrhage in the retina of the right eye. There was a slight numbness of the right side of the face. Bone conduction was reduced 50 per cent in the right ear while air conduction was practically absent on the right side. The tongue deviated to the right. Gait was normal. There was no nausea or vomiting.

X-rays showed erosion and enlargement of the internal auditory meatus on the right side.

On March 1, 1939, a large acoustic neuroma was removed from the right posterior fossa. It was with great difficulty that the entire tumor and capsule were removed instead of an intracapsular extirpation. Convalescence was normal.

Because the tumor originated from the



acoustic nerve in the cerebello-pontine angle, the syndrome was typical for an angle lesion, namely, a tinnitus or ringing in the right ear accompanied by disturbance in hearing and unsteadiness of gait, and later, severe headache, nausea and vomiting.

Case VIII: Left Cerebellar Meningioma, Non-Malignant, Operation, Tentorial Attachment, Complete Removal: E. S., female, age 26, was admitted to the hospital January 20, 1939. In 1929, she had first noticed headache, nausea, vomiting, unsteadiness of gait and a tendency to fall to the right. Shortly afterward there was a definite failure of vision which became quite pronounced and a little later double vision occurred. At this time I removed a meningioma from the right cerebellar region.

She secured relief of all symptoms and carried on her usual activities without complaint until November, 1938, at which time she developed a diplopia and a headache. Myoclonic seizures occurred next and in the latter part of December, 1938, an unsteadiness of gait was noted. Pain in the left occipital region first occurred in January, 1939. Numbness of the left side of the face started about the same time.

On admission January 20, 1939, it was found that there were two diopters choking of both disks and a lateral nystagmus of second degree. There was past-pointing, but definitely more pronounced on the left side than on the right. The Rhomberg sign was positive. There was definite incoordination, of the left extremities primarily. On pressure in the left cerebellar region the patient complained of considerable tenderness.

X-rays revealed a calcified tumor in the left cerebellar region.

At operation March 31, 1939, a large meningioma was removed. It was attached to the tentorium and also to the lateral sinus, requiring removal of portions of both of these structures. The patient made a normal convalescence.

This was a benign lesion. With its complete removal she should not have any recurrence of the lesion. The symptomatology is typical of a cerebellar lesion inasmuch as disturbance in gait, nystagmus, Rhomberg, past-pointing, incoordination and local tenderness were present.

#### SUMMARY

1. Symptoms resulting from intracranial tumors occurring in various portions of the brain are emphasized.
2. The symptomatology of the frontal,

temporal, parietal, occipital lobes, as well as basilar and cerebellar symptom complexes are illustrated by case histories.

\*Penfield, W.; Erickson, T. C.; Tarlov, I: Arch. Neurol. Psych. 44: 300-315, August, 1940.

#### DISCUSSION

**Austin Blech:** I should like to ask Dr. Jelsma to give an estimate of the number of doctors the average brain-tumor patient has consulted before having a diagnosis made; also how safe we are if we routinely examine the eyegrounds of patients with headaches, and dismiss the patients who have not choked disks.

**M. C. Baker:** One of the most useful adjuncts in the diagnosis of intracranial pathology is the factor of abnormal eye findings. We will mention this as more or less constant. They do not follow the same pattern but I think a great many tumors, abscesses, gummas have certain eye findings and all share certain eye findings which help in diagnosis. We know that according to the location of the tumor we have certain eye symptoms. For instance, if the optic nerve is affected, the pathology is limited to one eye; if the optic chiasma is affected, then both eyes, usually a bi-temporal hemianopsia, if the optic tract then a right or left homonymous hemianopsia and so on back through the optic radiations in the parietal and occipital lobes.

Dr. Jelsma intended to report a case I sent in—operation with good recovery. It was a very unusual case, with mixed findings. A man sixty-six years of age came to me one and a half years ago, complaining of disturbance in visual acuity with a vision of 20-50 in one eye and 20-200 in the other without improvement with new lenses. I ran over him pretty thoroughly. I was not looking for a tumor on account of his age. On dilating the pupils, I found he had exudates and hemorrhages in the left eye and put it down as arterial changes, also tobacco amblyopia. He improved on iodides to 20-30 vision in the good eye. There was some constriction in his fields. The result was I finally diagnosed it as pituitary tumor. The mixed findings in the pathology of the retina, improvement under iodides, bi-temporal hemiopia, (with the left eye worse) were misleading. Dr. Jelsma confirmed my diagnosis and this man, although sixty-six, was operated with good results. Vision now 20-15 and 20-100 with fields in both eyes improving. The man is back at work, carrying on as before.

As I started to say before, the fine point in diagnosis lies in interpreting the visual acuity and fields of vision. If a patient comes in with extraocular palsy, with deviation of one eye, vertigo, nausea and vomiting, even a layman can tell that person has a central lesion. The fineness of diagnosis, both with the neurologist and ophthalmologist is to be able to interpret the

disturbance in visual acuity and visual fields and to locate in the brain the probable site of the tumor.

**J. Kenneth Hutcherson:** Dr. Jelsma has shown the value of early diagnosis and the need of surgery when indicated. His results have been most gratifying, and he is to be highly commended. I would like to pay tribute to the general practitioners who so frequently made diagnosis without the aid of any of the clinical laboratories. One case was reported here tonight by Dr. Jelsma, which was sent in to me by a general practitioner who made a tentative diagnosis before he sent the patient in. He sent a slip of paper by the patient stating that he thought this man had a pituitary tumor. The patient was losing his vision very rapidly in the right eye and at that time had less than 20/200. This patient had been fitted with glasses by an optometrist who told him that his vision could not be improved. A few months later the right eye began to turn out and this caused the patient to go in to see his family doctor.

Most pituitary tumors infringe on the chiasm and produce a bi-temporal hemianopsia. In this case, however, there was no involvement of the left tract whatsoever. The fields in the left eye showed no abnormality. The vision was down so bad in the right eye only the form field could be made and this was markedly constricted. Three months after Dr. Jelsma had removed this tumor the patient's vision in the right eye had risen to 20/40. The last report from this patient was to the effect that he was shooting quail without any difficulty. The neurological surgeons have been a great help to me in diagnosing and treating many cases in my eight years in the practice of ophthalmology.

**John D. Campbell:** It is difficult for the average physician, not doing neurological work, to realize how much neuroanatomy, neuropathology, and clinical neurology is involved in a paper of this kind. I believe that the progression of symptoms is the important thing in a brain-tumor history. For example, a patient has a headache for a couple of years, later ringing in the ear, buzzing, impairment of hearing; other cranial nerve signs are likely to follow such as facial paralysis, these symptoms occurring in that order could spell nothing but acoustic neuroma.

I believe that if a doctor, not a neurologist, was interested in the diagnosis of brain tumors, he could do nothing more beneficial than to make a careful study of epilepsy. Epilepsy is an interesting disease. Before studying neurology, my conception of epilepsy was a fit, and nothing more. As a matter of fact, epilepsy may affect any or all parts of the brain. By thoroughly studying this condition one is led into a consideration of the function of the various parts of

the brain. Back of the fit is the functioning of the entire brain. One can spend an hour talking to an epileptic; have him describe his attacks, the way he feels before the attack, etc. The aura in particular is an interesting phenomena; some see lights, others experience odors, and others have sleepy sensations.

Dr. Jelsma did not have time to emphasize the importance of X-rays in the diagnosis of brain tumors. Areas of calcification, localized bone erosion, and enlarged foramina may all be evidence of a neoplasm.

At the Neurological Institute, we saw a considerable number of brain tumors; many of these patients had been treated for syphilis. Many times, just because a patient has neurologic signs or symptoms, and the blood test was positive, he would be treated for syphilis. There is systemic syphilis and central nervous system syphilis. Until the spirochete enters the central nervous system, as indicated by a positive spinal fluid, it cannot cause neurologic signs and symptoms. It should be remembered that a patient can have syphilis and a brain tumor at the same time.

**Walter Dean:** In reply to Dr. Campbell's question, "Did Dr. Jelsma make X-Ray studies of these intracranial tumors?" will say that in our case of unilateral exophthalmus of the highest degree which I thought to be due to a vascular tumor of the orbit, Dr. Jelsma's careful study of our old films showed it to be a cerebral tumor which had infiltrated the walls and contents of the orbit. Dr. Baker explained how the eye grounds and fields of vision not only demonstrate increased intracranial pressure but may even locate the tumor. The motor nerves of the eye are indicative too.

In the case above mentioned the olfactory nerves were implicated so that the sense of smell was abolished. Next to the optic nerve, the auditory nerve is the most informative.

Dr. Bloch's question about how many false steps each patient made before an intracranial condition was realized is very interesting. Most people's obsession to call every headache, every abnormal head sensation, "sinus," is the worst pitfall I have discovered in the practice of medicine.

**Franklin Jelsma** (in closing): In reply to Dr. Bloch's question, the number of doctors tumor patients consult, is depending on the type of patient and his relation with his physician. Many tumors are hidden and are difficult to find, even by the neurosurgeon. Some do travel around considerably and in some cases many things are done before a brain tumor is suspected.

In regard to dismissing patients that have some suggestive symptoms but do not have choked disks: When one allows the patient to go, you allow the tumor to grow and diminish the chance for the individual to receive proper and satisfactory treatment.



## HIGH BLOOD PRESSURE

HARVEY H. ROBERTS, M. D.

Georgetown

Perhaps there is not another subject within the category of medicine, that is more baffling to the medical profession than hypertension! To the laity, the subject brings confusion, alarm and hysteria.

The subject of high blood pressure has become a socialized topic. "Have you had your blood pressure taken?" Or you may hear, "I must have my blood pressure taken." These expressions are familiar conversation at the clubs and all other social gatherings.

The diagnostic interpretation of the etiology of hypertension syndrome is most difficult. Disastrous results to many important organs of the body may follow, if not discovered and proper treatment instituted. The appalling increase in the death of professional and business men, who are dying at the very zenith of their usefulness, is tragical.

Many investigators, by theoretical experimentation, are seeking the cause, as well as the proper treatment for the relief of this most distressing condition.

The presence of hypertension is not a new discovery. Richard Bright suggested in 1836, the existence of a causative relation between renal disease and otherwise unexplained enlargement of the heart.

Volhard states that this relationship was suspected in China, 200 years B. C. He also, finds suggestive reference to it in the Old Testament.

Volhard is willing to accept the view of a possible origin in some cases of hypertension, which may be associated with some vascular disease of the kidneys. Others, without any impairment of excretory function, may show the beginning phase of an essential hypertension.

This view has also been endorsed by Moritz and Oldt through the anatomical study of the distribution of arteriolar sclerosis in various organs of the body with the presence of essential hypertension. However, we know now that essential hypertension may be present in the patient without any renal or vascular disease being detected.

Idiopathic hypertension in young people. McCracken believes that the tendency on the part of the physician to regard malignant or idiopathic hypertension as a disease of the "forties," may be due to the fact

that blood pressure of younger persons are taken very infrequently. As one becomes older conditions arise or symptoms develop which bring the patient to the physician to "have the blood pressure taken." The hypertension is now discovered and the condition is attributed to the age of the patient.

Had the examination been made earlier, when the patient was younger, the hypertension could have been discovered at its very beginning and possibly the results would have been less severe.

I am thoroughly convinced that the blood pressure should be taken with every patient, regardless of age, as a general routine.

No doubt, one of the most disastrous conditions present in middle-life is essential hypertension. It is now one of the most malignant maladies with which the physician has to contend.

The seriousness of essential hypertension becomes all the more disturbing because of the lack of knowledge of its etiology and the fallacy of diagnosis.

That essential hypertension is caused by the presence of some substance or substances which give rise to a vasoconstriction of the arterial system, is admitted by most investigators.

Generalized or localized arteriosclerosis will ultimately lead to an increased blood pressure, resulting from the damage to the heart, kidneys and vascular system.

It has been suggested by some investigators that a susceptibility for essential hypertension may be analogous to an individual type. That is, patients with large chest, very robust, muscular and inclined toward obesity, are necessarily predisposed to the development of essential hypertension.

While those patients of a leaner type are comparatively free from hypertension, the fact is, that patients of the leaner type who have a low blood pressure live longer than those of the opposite type. The leaner patients thereby, have an inheritance, a legacy rather than a handicap.

Blood pressure varies materially in different individuals. What is normal for one person, may be pathological for another. A safe criterion to follow is, to regard any systolic pressure above 150 as pathological, and any diastolic pressure above 100 as pathological. The variation of the diastolic is more important than the elevation of pressure of the systolic, the pulse pressure being the guide as the danger to be apprehended.

It has been demonstrated that the saline extract from a normal kidney has pressor properties. Tigersted and Beramann (1871) discovered this extract and named it renin. Recently other investigators have confirmed this work and report the presence of a large amount of pressor substances in the saline extract of an ischemic kidney. This discovery or experimentation has been made through animal experimental hypertension. Extracts of other kinds made from normal and ischemic kidneys have been prepared and found effective. (Harrison, Mason and Blalock.)

A relatively pure pressor substance has been isolated by a number of investigators. Page has shown that renin by itself is not a vasoconstrictor, but must have activation from some other substance present within the normal plasma.

Therefore, it appears to be established that hypertension developing after constriction of the main renal arteries, or as the result of a renal ischemia, produced by any other method, is due to some humoral mechanism of a renal origin.

Harry Goldblatt, of Western Reserve University, has made a very thorough and scientific investigation of hypertension resulting from an experimental hypertension of the ischemic kidney.

His methods are unique through the design of a special small silver clamp. The mechanism is such that the flow of blood to the kidney is easily controlled. This experiment has been carried out with the idea that some impairment of the blood supply to the kidney may have some specific effect in producing an essential hypertension.

The effect of a renal ischemia probably forms some substance or substances within the blood stream which may be the cause of essential hypertension.

The following method has been used by Goldblatt, who states that the method of experimentation consists of a small silver clamp, essentially, for the production of a renal ischemia by constriction of the main arteries of the kidney in the dog. The advantage over other devices that have been tried for vascular constriction, is that by this method the artery can be constricted to any desired degree. The constriction may be increased or decreased at will. The clamp can be removed and normal circulation to the kidney restored. Too long an interval must not elapse after the application of the clamp, because scar tissue which grows into all crevices, may make it difficult or even impossible to re-

move the clamp without injury to the renal artery.

Constriction of the main renal artery of one kidney results in elevation of the blood pressure. This may persist for several months. After the removal of the pressure that caused the impoverished blood supply, or ischemic kidney, the blood pressure usually returns to normal within four to six weeks.

If peripheral resistance can be induced experimentally, to cause an ischemic kidney to increase the blood pressure, is it not reasonable to believe some nervous reflex within the system may likewise produce an ischemic kidney, through some toxic substance generated therefrom. The humoral mechanism may manufacture, by presence of an ischemic kidney, some substance which will affect the vasomotor apparatus, by releasing into the blood stream a substance which will directly have contractile effect on the arterioles. Is it not also, reasonable to believe that some substance within the system, produced pathologically, may indirectly develop an ischemic kidney, thereby, directly causing an elevation of blood pressure?

An essential hypertension can exist without any renal involvement whatsoever. The experimental renal hypertension herein referred to, does not exclude the possibility that within the system some stimuli coming from an impaired central nervous system or from the sympathetic nervous system, may be an accessory for the beginning of an essential hypertension. In some cases this may be the primary cause for the elevation of blood pressure.

It has been suggested that this factor may be one also, which is influenced by the usual medical treatment for essential hypertension.

In the study of a large number of cases of hypertension, I am thoroughly convinced that essential hypertension has its etiological beginning through some impairment of the normal mechanism of the sympathetic nervous system, either by direct or indirect activity.

The vasoconstriction of the end arteries and the capillaries result in the elevation of the blood pressure.

Through the interference of the normal mechanism of the sympathetic nervous system, directly or indirectly, toxic substances are released into the blood stream, thereby creating a faulty metabolic stability which creates a substance having vasoconstrictor activity. This may develop a condition for the beginning of essential hypertension.



The logical conclusion therefore is, that the restoration of the normal equilibrium of the mechanism of the sympathetic nervous system will decrease the hypertension, and may be the means of restoring the condition to a state of normality.

Some investigators have advanced the theory that the beginning of an essential hypertension is in the intestinal tract; that certain bacterial invasion will give rise to a toxic substance which acts as a vasoconstrictor upon the vascular system. It is worthy of notice, that in most cases of essential hypertension, constipation and gaseous bowels are present.

It has been established that anything which will produce a vasospasm of the arterial system, either through systemic intoxication or otherwise, will cause an elevation of blood pressure.

Hyperactivity of various glands have been held responsible for the development of essential hypertension.

It has been demonstrated that a malignant essential hypertension may be present, without any vascular impairment, or excretory insufficiency of the kidneys. Therefore a renal ischemia is not necessary for the presence of an essential hypertension.

If a renal ischemia produced by artificial constriction will cause a rise in blood pressure from a perfectly normal kidney, then there must be some other factors which develop an essential hypertension. An impoverished blood supply for the kidney, forming an ischemic kidney as a result of artificial constriction, may receive pressor effects from other sources than the kidney.

If an essential hypertension is present, and the kidneys are free from any excretory insufficiency, or vascular impairment, the logical conclusion is there are other factors within the system which are responsible for the presence of an essential hypertension.

Liver extracts, used hypodermically, have been recommended for the reduction of a hypertension. Its medicinal value gives only a temporary relief. This effect has been attributed to the removal of guanidine within the system.

Guanidine is located within the muscular system of the body.

To permanently correct the beginning, or to remove essential hypertension, is the one aim of every conscientious physician, as well as the diligent investigators.

The treatment of "gaseous bowels" is benefited by the use of sulfanilylguanidine. This new discovery has powerful antiseptic

qualities, being slowly absorbed from the intestines, it is of special value as a therapeutic assistant. The antibacterial activity makes it of special benefit for the removal of localized intestinal infection.

For the generalized or localized arteriosclerosis nothing will give more satisfaction than the use of large doses of Organic Iodine. This should be given in 40 min. doses t.i.d. and continued for a long time.

In the treatment of essential hypertension, I have found the use of electric alternating currents, having an oscillation of 20,000 to 25,000 per second, most satisfactory. The current has special beneficial effect upon the sympathetic nervous system. Renewed vitality for the nerves is secure and a more normal blood supply to various organs is obtained. Impoverished kidneys and other vital organs are given a more normal blood supply. Metabolic activity is increased, better oxidation developed and toxic substances are removed. Under this form of treatment patients have remained free from their hypertension for months.

Short wave electrical currents over the carotid sinus, where there is a generalized arteriosclerosis, is of special benefit. However, this treatment should not be given where there is present chronic nephritis, asyctole, or any thyroid interruption.

Lacto-vegetable diet, with light breakfast and dinner is very essential. Open air exercise, walking on the level ground, avoiding grades, hills or any strenuous movements is important.

Patients with essential hypertension should use only sponge baths. Cold water baths, either shower or tub baths are highly injurious. Many a sudden collapse, or serious accident has been attributed to the lack of this precaution.

The drinking of a pure natural mildly alkaline water is one of the best medical adjuvants to be secured. It is better to drink in small quantities and frequent intervals during the day.

Starvation in drinking water, or the lack of properly taking pure water into the system is one of the handicaps in the practice of medicine.

A large majority of men and women fail to drink sufficient water to maintain a proper metabolic balance for the preservation of their health.

Early diagnosis of essential hypertension is necessary that the future management of the patient may be for the most scientific value in prolonging life.

## SUMMARY

It has been demonstrated that there are substances within the system responsible for the etiology of essential hypertension.

Experimental investigation shows that pressor substances may be developed, which directly or indirectly, cause a rise in blood pressure.

By producing an artificial impoverished blood supply for the kidney, resulting in an ischemic kidney, hypertension is developed.

Investigation demonstrates that essential hypertension may be present, without any vascular or excretory insufficiency of the kidney being present.

Present etiological sources of essential hypertension depend upon the discovery of the substance which interferes with the normal mechanism, which guards against any pressor or vasoconstrictor, which will cause an elevation of blood pressure.

Improper nerve or impoverished blood supply, that will develop some pathological change in the mechanism of the system, will generate a toxic poison which will destroy the unanimity of the physiological mechanism of the human body.

## BLEEDING PEPTIC ULCERS

H. H. HAGAN, M. D.

Louisville

The problem of the treatment of peptic ulcers is primarily medical, because experience has shown that early surgical interference gives disappointing results. A few years ago confirmation of the clinical diagnosis of peptic ulcer by the roentgenologist brought a large percentage of these cases to surgical treatment. Today all simple uncomplicated peptic ulcers are placed upon rational medical regime and approximately 80% of the patients become clinically free of symptoms and have healed ulcers from an X-ray standpoint. So the role of surgery has become definitely limited to intractable ulcers which have failed to improve after a prolonged and careful medical regime; and more particularly to those cases presenting one of the major complications. The complications which demand operation are cicatricial obstruction and perforation, and cases of acute massive hemorrhage are added to this list by certain authorities although there is no generally accepted plan of attack for bleeding ulcers.

The incidence of bleeding from peptic

ulcers has been variously estimated to occur in 10 to 95 per cent of all cases. It seems safe to assume, on the basis of dependable reports, that appreciable hemorrhage occurs in at least 25 to 30 per cent of the cases when observed for a ten year period. The amount of the hemorrhage may be slight, moderate or severe. Roughly we may classify as slight bleeders those cases in which occult blood can be repeatedly demonstrated. As moderate bleeders, those having gross melena or hematemesis, but not sufficient hemorrhage to lower the blood beyond 70 per cent hemoglobin and 3,000,000 red cells. As severe bleeders, those having sudden or gradual massive loss of blood which has resulted in marked prostration, or severe secondary anemia. It is the last mentioned group which is of the greatest surgical interest, because these cases present one of the most difficult problems in gastro-intestinal surgery. In many cases of gastro-intestinal hemorrhage the origin of the bleeding is indefinite and the differential diagnosis is difficult. In cases of severe hemorrhage, in which a peptic ulcer has previously been demonstrated by X-ray and clinical study, it is safe to assume that the hemorrhage had its source in the ulcer. However, other sources and factors must not be overlooked if disappointing results in treatment and serious errors in diagnosis are to be avoided. Considerable gastro-intestinal hemorrhage, not associated with ulcer, may be the result of extrinsic or intrinsic causes. The most important extrinsic causes are those produced by lesions of the liver or spleen, Banti disease being an example of these conditions. Among the intrinsic causes of gastro-intestinal hemorrhage, without definite ulcer formation, are the various types of inflammatory lesions and benign and malignant neoplasm. (e.g., esophageal varices, gastritis, carcinoma, polyposis, etc.)

About 1900 Mikulicz, Kronlein and others expressed the opinion that operation for acute massive hemorrhage is more dangerous than expectant treatment, and this continued to be the almost universal experience until recent years. Twenty years ago Finsterer "suggested early operation as the treatment of choice for hemorrhage from a chronic ulcer because such hemorrhage, coming from an eroded large artery at the base of the penetrating ulcer, could be stopped permanently only in this manner." In this country Allen was among the first to insist upon direct operative attack in cases of massive bleeding from peptic ulcers. A study of the problem has been



stimulated in many clinics and helpful facts have been presented by Allen, Benedict, Finsterer, Hinton, Pfeiffer, Snell, Wangenstein, Blackford, La Due et al. Previous to these studies it was usually stated that hemorrhage from bleeding ulcers rarely caused death and that the hemorrhage is usually arrested short of a fatal termination. It is now an established fact that approximately 10% of the peptic ulcer patients admitted to hospitals for massive hemorrhage will die from exsanguination if conservatively treated. Therefore, the problem resolves itself into one of selecting this 10% of potentially fatal cases from the group of gross bleeders and promptly extending to them a reasonable surgical procedure. Only the fact that the surgical attack upon an acute bleeding ulcer is a formidable procedure, and a difficult one to carry through with a reasonable mortality, will deter the acceptance of surgical treatment.

All statistical studies indicate that the age of the patient is the most important differential point in selecting the cases who will cease to bleed and those who will bleed to a fatal termination. Allen and Benedict in 1933, made a study of bleeding duodenal ulcer cases admitted to Mass. General Hospital in a period of twenty years and found that the recovered cases averaged 41.8 years while the fatal cases averaged 56.3 years of age. In gastric ulcer cases the average age of the fatal cases was only slightly lower. Blackford found that there had been 116 cases of fatal hemorrhage from peptic ulcers in Seattle during the past five years and 97% of these patients were past 45 years of age. The real determining factors in these cases is the size of the involved vessel, the degree of arteriosclerosis, and the degree of induration in the ulcer bed surrounding the vessel, and the relation of these factors to clot formation. Sudden collapse, fainting, fall in blood pressure, melena and hematemesis indicate hemorrhage of serious proportion. If it is difficult to maintain a satisfactory blood pressure, notwithstanding judicious transfusions, one should conclude that bleeding is continuing from a fairly large vessel. If satisfactory improvement occurs only to be followed shortly by the recurrence of profound shock, it is probable that a clot has been formed but later dislodged. It is the patient in the upper age group, with these evidences of uncontrolled hemorrhage, who should be considered for surgical treatment. And they should not be allowed to repeatedly bleed

to critical levels, for the mere replacement of blood by transfusions will not restore all vital factors impaired by hemorrhage and depression. An early decision for or against operation should be made. An increasing number of surgeons agree with Gordon Taylor's statement that "Finsterer's first 48 hours is still the optimum period for surgical attack in hematemesis."

An accurate estimate of the anatomical location and pathological extent of the ulcer is an important basis for prognosis and treatment. The superficial flat ulcer will produce only slight or moderate hemorrhage, and will yield to conservative medical treatment. The chronic penetrating crater type may erode one of the large vessels with resulting massive hemorrhage. The pancreatico-duodenal artery is the one most frequently involved. The inferior pancreatico-duodenal and right gastroepiploic have their origin from the gastroduodenal which arises from the hepatic and runs between the duodenum and pancreas. The inferior pancreatico-duodenal is given off by the superior mesenteric. The profuse anastomosis of these vessels behind the duodenum requires that all be ligated to control hemorrhage from any one of them if surgical attack is made. In gastric ulcer the most severe hemorrhage is likely to have its origin from an erosion of the left gastric artery.

It should be emphasized that the group of slight bleeders and the group of moderate bleeders will constitute approximately three-fourths of our total cases of bleeding peptic ulcers. These are definitely medical cases and give good results when treated over a considerable period of time by rest and restriction in diet, and they do not become surgical unless they fail to yield to routine medical treatment and there is recurrent moderate hemorrhage to the point of serious anemia. In the remaining group of severe bleeders, or acute massive hemorrhage, the choice between conservative treatment and radical surgical treatment should be promptly made after consideration of all factors in the individual case. It is generally agreed that conservative treatment is indicated in all patients below fifty years of age. Conservative treatment should consist in complete rest, adequate sedation, hypodermoclysis, Levin tube in the stomach to prevent nausea and vomiting, and blood pressure reading at half hour intervals. Blood should be available for transfusion and given in small quantity by slow drip method if systolic pressure falls below 70 m.m. After two to four days

of freedom from hemorrhage, fluids may be given by mouth. Although conservative treatment will carry most of the younger group through a bleeding attack, many of them should be advised to have a radical gastric resection after complete recovery from the attack.

A more radical course should be considered for the acute massive bleeder who is over fifty years of age, as there is considerable evidence indicating that one-third of these will bleed to a fatal termination. Therefore one is justified in recommending gastric resection as soon as shock is properly controlled if there is a positive diagnosis, a patient of reasonably good risk, plenty of donor blood and an adequate surgical team. Hemorrhage is logically controlled by ligation of the vessels entering the ulcer area and accompanied by subtotal gastric resection. Gastro-enterostomy is not likely to save any patients who would not have been saved by conservative treatment, and a transfixion suturing usually results in failure.

#### CONCLUSIONS

1. Surgical treatment of peptic ulcers is indicated for intractable ulcers, obstruction, perforation and selected cases of acute massive hemorrhage.
2. Slight and moderate bleeders are best treated by a medical regime.
3. Massive bleeders should have the advantage of immediate medical and surgical opinion.
4. The massive bleeders in the age group below 45 or 50 should be treated conservatively and radical surgery considered after complete recovery from hemorrhage.
5. Carefully selected cases of massive bleeders in the age group above 50 should have the advantage of radical surgery within the first 48 hours, otherwise approximately one-third of this group will bleed to a fatal termination. Surgical treatment should reduce this to a 5% or 10% mortality.

#### DISCUSSION

**Virgil Simpson:** A bleeding vessel in a peptic ulcer base is not the result of a deficiency factor and is not controlled by Vitamin K. The bleeding in obstructive jaundice or severe liver disease or in hemorrhagic disease of the newborn does depend upon deficiency factors. One of these is bile in the intestine and the other is Vitamin K. Their combined administration controls the hemorrhage. The index to this deficiency and the measure of its therapeutic success is the prothrombin level in the blood. The mechanism of prothrombin formation is not clear but its dependence on Vitamin K and bile has been estab-

lished. The use of Vitamin K in any hemorrhage with a normal prothrombin value is not justified in the light of our present knowledge.

Vitamin K is of no value in hemophilia, menorrhagia or essential hematuria. Such preparations as Koagamin depend on oxalic acid for their coagulant effect and should not be thought of as Vitamin K preparations.

#### THE PRESENT STATUS OF IMMUNIZATION IN CHILDHOOD

JAMES H. PRITCHETT, M. D.

Louisville

The need of and for prevention of disease is greater now than ever before. In this age of speed and more speed, prevention becomes at once an integral part in national defense, for the child of today is the man of tomorrow, and what the home is, this and nothing else will the nation be. We recall with considerable chagrin the number of men who were rejected in the World War, due in great part to conditions which could have been prevented. We are told opinions are mightier than armies, and yet I distinctly recall having seen an old vignette representing a heavy sword thrown across a dozen quills crushing and destroying them. The mighty men of the military continue to destroy life but the might of medicine will continue to strive to prevent disease and death.

Public opinion molded by an alert and progressive medical program has come to expect, yes and even to demand, protection for their children. Rapid progress has been made in preventive medicine, perhaps too rapid, since it is a well recognized fact that time is the chief factor in the evaluation of progress made.

Witness the many agents and methods used and advocated in the prevention of disease; nevertheless, we know we are on firm foundation and science merely seeks firmer foothold in the ever upward climb. The average physician engaged in active practice has little time or opportunity for experimental or research work; therefore we must for the most part rely on the advice and recommendation of those men, who by large clinical and hospital experience are able properly to evaluate newer drugs, tests and procedures. What is the current belief and practice in the status of immunization? Let it be said that while agents and methods vary somewhat, the ultimate goal is the same. Dealing with the



subject from the standpoint of antiquity, smallpox is first in discussion. Despite the fact that compulsory vaccination is a law in most states before school age, I am certain that by and large the majority of children are not protected before the sixth or seventh year. From both a practical and theoretical standpoint, this should be done at six months to the first year. It is agreed that it is wise to give preference to the more established practice. It is claimed that the reaction is less in infancy than in older children. However, it seems to me that the usual practice is to choose that time after dentation avoiding the hot season and when the child is in the best physical condition. That there may be considerable reaction in many children, we well know. The multiple pressure method is perhaps the one of choice using glycerinated vaccine virus, although newer antigens are recommended such as the allantoin chick embryo vaccine of Goodpasture, and the lyophil tissue vaccine of Rivers used intracutaneously. The site of vaccination is a matter of choice. Page of Portland, Oregon, suggests the inner belly of the biceps; this is scar concealing, desirable in females, and in males protects from injury. He also claims there seems to be far less gland reaction. Greenebaum and Selkirk (University of Cincinnati, '39) state: "The age factor is a further consideration in the possibility of guarding against post-vaccinal encephalitis. The report of the Academy of Pediatrics Immunization Committee states that vaccination should be performed before or by the third year and re-vaccination at the fifth year. Hoyne makes a very plausible plea for early vaccination in these words: "It is well known that smallpox, erysipelas, whooping-cough and chickenpox may occur during the first few weeks of life," and in view of this fact, vaccination should be the first protective measure to be adopted in the life of the child to afford artificial immunization. I believe that many of the so-called negative takes are due to faulty technic. Vaccination is a minor procedure requiring major precaution. The intradermal vaccination as suggested by Rivers is said to be especially valuable in those infants who have eczema. Certain disadvantages preclude its use on a large scale. Inasmuch as no immunity to whooping-cough is handed down to the infant by the mother, immunization against pertussis becomes at once of paramount importance. Despite the fact that the highest incidence seems to be about the third or fourth year, it is generally con-

ceded that protection should be sought at a much earlier age. We are not so certain regarding the one best agent or method used in preventing whooping-cough. There are two or three schools of thought. Such men as Sauer, Kruger, Toomey and others differ somewhat in their viewpoints. In 1933 Sauer published the first report on his large scale of investigation. The results at that time were most encouraging. The author concluded that protection through vaccine was complete within four months and such protection lasted for an unknown period. Lansdown, Arch. Ped. Oct. '39, reviews the value of specific vaccines in pertussis. The consensus of opinion is that, despite discrepancies and strengths of vaccines used, one thing stands out: there is a constant advantage of the vaccinated group over the controls. Since 1938, Sauer has used the so-called double strength vaccine, a total dosage of 80,000m to 100,000m organisms, or a total of 8 cc. For infants and children under two years of age it is suggested that 1. cc double strength be injected subdermally in each arm, repeated in ten to fourteen days, increasing doses to 2. cc or perhaps better still 1½cc. The third dose, the same in size, is repeated in seven to ten days. There may be reactions but seldom severe in character. It must be admitted that not a few immunized develop pertussis later, but I believe the attack is milder and shorter in duration. I believe it should be a routine measure despite the fact that it is only about seventy-five percent protective. Mention should be made that the vaccine used should have been kept at a uniform temperature until used and if frozen it has no value. On the other hand, when exposed to prolonged, slight heat likewise the value is lost.

Diphtheria, perhaps, offers the best example of what can be accomplished in the way of prevention, and yet this came about only after years of research, investigation and experimentation. There are two or three methods in use at present. The first toxin-antitoxin, in doses of 1.cc seven days apart, at least two such injections and some men suggest three. This method is used chiefly in children past seven years of age. That reactions do occur, we well know. However, the symptoms produced are seldom severe. It is well to mention the fact that diphtheria-toxoid, plain or otherwise, seems to cause more reaction in older children than does the T. A. mixture. The second method almost universally used is the administration of two and often three doses of alum precipitate toxoid, with one month

interval between doses. As to the best time to protect against diphtheria, between nine and twelve months is the logical choice. The Schick test should be done three months following the last dose. There is a third method now advocated. That is the administration of the combined tetanus and diphtheria-toxoid alum precipitate which gives a simultaneous protection. J. V. Cook of St. Louis, states that the use of the combined toxoid is routine in the St. Louis Children's Hospital and Washington University Clinic. The dose is 1.cc which contains at least 15 antigenic units of diphtheria toxoid. After an interval of two or three months, a second dose 1.cc is given. To reduce the possibility of severe reaction, especially in older children, it might be well to administer .2cc, and if no reaction is noted to give .8cc in two or three weeks. Should there be a reaction following the succeeding dose, two .4cc may be given at two week intervals. We are told that most children do not have such reaction and that the 1.cc dose can be carried out in sequence without trouble. Should occasion arise before immunization is complete, that is to say, if diphtheria develops or tissue laceration occurs the usual procedure for immediate protection of an unimmunized subject should be carried out. It is stated that if a stimulating dose is given there is a tremendous rise to ten or more units per cc of blood which is more than the administration of antitoxin can give; this rise is noted in six or eight days after the third dose, thus occurring prior to full incubation period of tetanus. These results, we are told, will not occur unless there is at least one month between the second and third dose. It is of no value between the first and second dose. It has been shown by Jones and Moss that while a month after the subcutaneous injection of 1,500 of tetanus antitoxin the blood serum antitoxic level has dropped to .001 per cc, whereas after the third or stimulating dose the antitoxic level is 3.3cc. If and when such good results are more widely obtained this will become the method of choice.

Despite the great amount of work done in the field of scarlet fever, I feel that we are not ready to adopt unreservedly the program of immunization of all children. It may perhaps be expedient to immunize groups such as children in orphanages, etc., but the low susceptibility rate, plus the severe reactions that so frequently occur, discourage its routine use.

Measles is a virus disease and there is no skin test to determine immunity. It may be

wise at times to protect young infants or those who are debilitated against measles by the use either of placental extract or immune globulin, the dose being two to four cc given immediately after exposure or at least the third day after exposure. This will protect for the time being. In the case of older children it may be desirable to obtain a modified measles. This is done by the injection of two to four cc globulin or six to ten cc of convalescent serum at about the sixth day following exposure. The modified measles so produced gives immunity. Whole blood can be used twelve to twenty cc. This, however, is rather painful and is seldom used. Greenebaum and Selkirk present the following chart of protective immunization which I think is quite simple and valuable: 6 months smallpox vaccination, 9 months diphtheria immunization, 11 months pertussis immunization, 12 months Schick test, 2 to 5 years tetanus toxoid immunization, 5 years repeat Schick test and smallpox vaccination.

#### DISCUSSION

**W. W. Nicholson:** I was especially interested in his schedule for immunization, and wish to ask Dr. Pritchett what he thinks of giving the first diphtheria toxoid around 7 or 8 months of age, the following month giving the pertussis immunization, and then the last diphtheria toxoid the third month. I have used this method, and like it very much, in that you can complete the immunization over a short period. I also would like to know what he thinks of giving tetanus toxoid in combination with the diphtheria.

**Hugh R. Leavell:** There are one or two points which I would like to emphasize. One, particularly, is in regard to smallpox and especially intradermal vaccination. For several years we accepted certificates for intradermal vaccinations. However, a year ago the intradermal vaccination was found not entirely successful in producing immunity. The multiple puncture method used subsequently did give a primary take. For that reason we have stopped accepting intradermal vaccination as a prerequisite to entrance to school.

From the standpoint of whooping cough protection, Dr. Pritchett made the point that if given, it ought to be given early. Our records show that ninety per cent of deaths from whooping cough occur in young children. Protection should be made available before the end of the first year.

Regarding diphtheria, an intensive campaign has been conducted in recent years among pre-school children for immunization. In 1934 there were 380 cases; in 1940 there were 20 cases.



That decrease can be attributed to the intensive immunization in pre-school children.

In line with Dr. Pritchett's remark that every private physician should be a public health officer I want to call your attention to the fact that we are soon to make a report to the Chamber of Commerce regarding the preventive work done by private physicians. I hope all of you will get your reports in to the Board of Trade.

**James H. Pritchett** (in closing): I, too, believe that diphtheria toxoid serves it best purpose at or about seven or eight months of age, i. e. the first dose, and perhaps the second dose some months later; in the interim, pertussis vaccine can be given. After all, no hard and fast rule can be applied to all cases. I still believe that the table as outlined above by Greenebaum and Selkirk is quite reliable and workable to those of us doing children's work. Let me emphasize the fact that the real purpose of such a paper and discussion is that every child should be immunized long before school age.

#### A CASE OF PULMONARY FUSOSPIROCHETOSIS PRESENTING DIAGNOSTIC DIFFICULTIES

J. A. BISHOP, M. D.

Louisville

This case is being presented as a case of pulmonary spirochetosis not so much because of the demonstration of the causative organisms, but because of their absence and the dramatic response to treatment. Recently, in 1937, Duffy of Oklahoma, reported to the Southern Medical Association the beneficial effects of arsenic and bismuth in the treatment of such conditions and described the symptoms of the disease as being very similar to tuberculosis. The diagnosis, he asserts, rests upon the clinical picture coupled with a thorough examination of the sputum finding, the fusiform bacilli and spirochetes and the absence of tubercle bacilli. He states that the diagnostic difficulties are often insurmountable. We have just such a problem in this case.

A white female, age 49, complained of nervousness, palpitation of heart, and an eruption of skin on thighs and legs. She stated that three weeks prior she had had a sore throat which lasted for a few days during which time she noticed white spots on the tonsils. One week later she consulted a doctor who gave her tincture of digitalis three times daily for the heart. After about one more week she noticed some cough, shortness of breath, loss of weight, and a peculiar red rash around the ankles

extending up the leg on to the thighs.

Past history: typhoid fever at 16, measles, mumps and malaria in childhood, menses not remarkable.

Family history: Mother died supposedly of tuberculosis, otherwise negative.

Her temperature was 101, pulse 110, the tonsils were slightly swollen and red, and the pharynx slightly congested. The thyroid was definitely enlarged, soft and symmetrical, and some slight exophthalmos was present. At this time the lung fields were clear of rales and showed no impaired notes on percussion. The heart seemed normal in position and size, and the tones were fairly good, and no murmurs were heard. There was a fine reddish purple rash extending from each buttock to ankles. Each lesion was small, maculopapular, and showed no evidence of pus formation. At this time a diagnosis of erythema multiforme and hyperthyroidism with thyroid heart disease was made. She was kept in bed with alkaline drinks, Lugol's solution, and sodium salicylate given for relief. This was in May, 1939.

On May 22, she was able to be up and about, but the pulse rate still running at 120, and there was marked tremor of fingers. She still complained of the weight loss, and shortness of breath. The Lugol solution was continued and a sedative given with digitalis to full effect added.

On May 29, she stated she felt better, but was still weak.

On June 1, pulse 120, respiration 28, and temperature 101. The chest was reexamined and at the left base posteriorly many fine rales were found, and it was noted that with each heart beat the intercostal spaces were retracted. She was fluoroscoped by Dr. R. R. Slucher who reported a heavy fibrosis of this area, but could not definitely state the cause, but suspected basilar tuberculosis. Chest plate was made, and Dr. Keith read this as being possibly tuberculosis, or a fungus infection. Consequently sputum specimen were sent to Dr. Weeter for both, which were reported negative. She was kept in bed on usual treatment for tuberculosis until July 6, when she reported at the Waverly Hill dispensary for X-ray. This was reported as very heavy pneumonitis in both apices, more marked left. Evidence of an old healed pulmonary tuberculosis of both apices. The character of the basal lesion can only be determined by repeated sputum examination. These were done by the Dispensary, and all were negative. She was then kept in bed on usual tuberculosis treatment.

On September 18, she still had a temperature of 99.6 and pulse of 130. Thinking that possibly this could be a fusospirochetal infection without being able to demonstrate the organisms, she was begun on two grains of thiobismol.

On September 25, one week later, she weighed 121 pounds, but the cough had cleared remarkably, and the temperature had dropped to 98.6. She was then given three grains of thiobismol. At the end of six weekly injections of thiobismol she had ceased coughing completely, temperature was normal, and she had gained in weight to 131. She was then given six doses of neosphenanime .45G. At the end of this period she was still free of fever, cough, appetite increased and was still gaining weight. I did not see her from the 18th of December until May 7, 1940, at which time she weighed 141  $\frac{1}{4}$  pounds, free of cough and doing well. At this time however, she showed a pulse rate of 120, which I now firmly believe was because of the excitement rather than disease.

## TETANUS, AN ANALYSIS OF CASES

GUY AUD, M. D.

Louisville

This report is concerned with the cases of tetanus treated at St. Joseph Infirmary, Louisville, during the period January 1st., 1921 to July 1st., 1940. There were ten cases, treated by various members of the staff, with a mortality of 70 per cent. Had all of these cases been treated by such methods as are employed today the mortality should not have exceeded 25-30 per cent.

Tetanus is much more prevalent in the South. Large series of cases reported by Graves (1), Moore and Singleton (2) and others revealing much information regarding the incidence and treatment of the disease. They find it to be most prevalent in the states lining the Gulf of Mexico, where there is warmth, moisture, a high degree of cultivation and fertilization of the soil; where the people live outdoor lives and earn their livelihood largely through agricultural pursuits.

Examination of Table 1 shows all but two of the injuries to have been minor. The two major injuries were a compound fracture of the arm and a crushing injury of the foot. There was one minor injury to the scalp. All other in-

juries were confined to the extremities, mostly lower. In only three instances was there any record of the treatment given the wound. The crushed foot was amputated on the fifth day and the patient died of tetanus. In the two cases with minor injuries in which debridement was done, one recovered. Prophylactic tetanus antitoxin was given in three cases, single doses of 1500 units each, and the two cases that had sustained major injuries and were given antitoxin died of tetanus.

It is generally accepted that antitoxin remains in the blood stream for less than 10 days, and that the usual prophylactic dose of 1500 units, which many believe to be inadequate, should be repeated at the end of one week.

The incubation period in this group (Table 2) of cases varied from seven to six days. The day of onset of symptoms of tetanus following injury seemed to be of less significance than the violence with which symptoms started and the rapidity with which they progressed. Two of the cases that recovered were not admitted to the hospital until four days after they had developed symptoms of tetanus. This would seem to indicate a mild onset of symptoms and slow progress of the disease. One case developed tetanus while in the hospital and survived only one day.

The amount of tetanus antitoxin given each case and the route by which it was administered is shown in Table 3. Only one case did not receive tetanus antitoxin. This was a child who had sustained a minor scalp injury, developed symptoms on the twenty-fourth day and recovered under treatment with sedatives and antispasmodics. Of the cases receiving tetanus antitoxin none recovered who had received less than 100,000 units. More than one-half of the cases treated were given less than 50,000 units. Of the two cases receiving antitoxin who recovered, one received 120,000 units and the other 245,000 units.

Five cases received antitoxin intraspinally and all died. In addition two cases died that had received no antitoxin intraspinally. Practically all of the cases received most of their antitoxin intramuscularly; about one-half were given antitoxin intramuscularly and intravenously and in a few instances it was administered intramuscularly, intravenously and intraspinally. None of the latter group recovered.

Interesting studies on the cause of death in tetanus have been made by Firor, Lamont and Shumacker (3), who make the following statement: "It is true that in



dogs with experimental tetanus the administration of antitoxin is ineffective once a lethal dose has been fixed and symptoms of central nervous system tetanus are present. But since in human beings there is no way of telling whether a lethal dose has been fixed, the clinician should continue to use antitoxin in local or central tetanus in hopes that a lethal dose has not yet been fixed by the body tissues."

SUMMARY

No conclusions can be drawn from an analysis of such a small number of cases as this group includes. However, many interesting and significant facts present themselves.

Statistics presented by Moore and Singleton (1939) show tetanus to be most prevalent in the states surrounding the Gulf of Mexico, probably the result of their moist subtropical climate.

Eighty per cent of the injuries resulting in tetanus were minor and all but one were injuries of the extremities. One case recovered that had received no tetanus anti-

toxin. None of the remaining cases recovered that had received less than 100,000 units, nor did any case recover in which tetanus antitoxin was administered intraspinally. The incubation period seemed to be of less significance than the violence of onset and rapidity of progress of the symptoms of tetanus.

During the past fifteen years the mortality of tetanus has been reduced one-half. Some of the contributing factors to this reduction in mortality are: The larger dosage and the earlier and more rapid administration of the tetanus antitoxin; early and adequate cleansing and debridement of wounds; maintenance of the patient's electrolytic, fluid and caloric balance; better sedation and control of spasms and better nursing care and closer medical supervision.

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TABLE No. 1  
CHARACTER LOCATION TREATMENT OF WOUND—RESULT

Case	Minor Injury	Major Injury	Treatment of Wound (Debridement)	Pro-Phylactic T. A. T.	Result
1	Splinter Hand		No	0	Died
2	Laceration Scalp		No	0	Recovery
3	Nail Foot		No	0	Died
4	Splinter Thumb		No	0	Died
5	Glass Foot		Yes	0	Died
6		Compound Fracture Arm	Yes	1500	Died
7	Laceration Foot		No	0	Recovery
8	Nail Foot		No	0	Died
9		Crushed Foot	Amputation 5th Day	1500	Died
10	Laceration Finger		Yes	1500	Recovery

TABLE NO. 2.  
INCUBATION PERIOD-DURATION OF ILLNESS—RESULT

Case	Incubation Period (Days)	Duration Symptoms on Admission (Days)	Result	Duration Illness (Days)
1	8	2	Died	4
2	24	4	Recovered	
3	60	1	Died	3
4	8	1	Died	4
5	7	1	Died	3
6	8	1	Died	2
7	9	1	Recovered	
8	10	2	Died	3
9	9	In Hospital	Died	2
10	12	4	Recovered	

TABLE No. 3  
TETANUS ANTITOXIN  
ROUTE OF ADMINISTRATION—DOSAGE—RESULT

	Intra- venous	Intra- Muscular	Intra- Spinal	Total	Result
1	0	10000	10000	20,000	Died
2	0	0	0	0	Recovered
3	0	35000	25000	60000	Died
4	20000	15000	55000	90000	Died
5	30000	10000		40000	Died
6		20000		20000	Died
7		120000		120000	Recovered
8	20000		20000	40000	Died
9		10000	10000	20000	Died
10	145000	10000		245000	Recovered

### DISCUSSION

**J. G. Sherrill:** This topic is one of the greatest interest and I am pleased that Dr. Aud has gone into the study of it. Col. Dasrah reported 44,000 injuries in the World War with only 4 cases of tetanus, which I think is graphic. If one makes a study of the records of the Civil War, you will find that an enormous number of soldiers had tetanus with many fatalities. In France the soil was prolific in producing the growth of the Welch and tetanus bacilli. With all that, only four cases of tetanus occurred up to the time of this report which is very instructive.

Now, the question of the time that a patient gets tetanus is important for this reason. If you give antitetanus serum early, immediately after the injury, it is more efficacious.

In the first World War, the English and French gave 500 units. Later, every patient wounded was given 1500 units at once. It is not wise to give repeated larger doses as prophylactic be-

cause of an allergic reaction. After the patient gets tetanus, we don't get the best results from serum which is especially useful as a prophylactic measure.

One thing in addition to serum is the use of sulphate of magnesium to get sedation and carry through to recovery. I have seen the experiments of Meltzer and Auer in the Rockefeller Institute and found them instructive. So, I wish you would read carefully the results of the last war and those of the Civil War for comparison.

**J. Keller Mack:** I should like to ask Dr. Aud about the case with the crushed foot, amputated after five days and tetanus developed four days later. Since the foot was gone does this mean that the toxin had been absorbed and fixed in the tissue before the amputation? I am interested in the active immunization for tetanus that is going on. Laboratory work indicates that it is very good in prevention. We



may learn something from the war experiences.

I might mention a recent experience I had with tetanus. A girl with typical disease was treated with antitoxin and avertin, after a week of treatment we tried to withdraw the avertin but she became rigid again. Other sedatives were not very effective. In all she was kept on avertin for about fourteen days. At that time she began to develop symptoms of a sort of insanity. She was very restless, irrational and would talk about her finger nails coming off. It was suggested that she had bromism since avertin is a bromide compound. The symptoms cleared up rapidly with administration of saline. As far as I know, no cases of bromism following avertin have been reported.

**G. P. Beutel:** I was a surgeon in the 32nd division. Every surgeon had to carry a pad with a carbon copy and original. One of the most important things was tetanus antitoxin of 1500 units. There were 3600 men in my regiment with not a single case of tetanus.

**Joseph E. Hamilton:** There is very little to add to these excellent discussions. One thing I have noticed in the few cases I have seen in the City Hospital, i. e., very severe cases, sedated for a prolonged period under avertin sufficient in amount to control rigidity and convulsions, tend to develop broncho-pneumonia. However, if avertin is discontinued any sooner, the same thing that Dr. Mack mentioned is apt to happen: there will be a return of convulsions.

The question arises, when to give antitoxin? What sort of wound merits the prophylactic treatment? I have come to believe that, when in doubt, one should give the antitoxin. Some of Dr. Aud's cases illustrate this very well, such as the one with the apparently trivial laceration of the finger. Cole and Elman say that a small wound caused by a clean instrument used around the house, e.g., a kitchen knife, generally does not warrant being followed by prophylaxis. Others, especially puncture wounds, do.

The local treatment is very important. As soon as the diagnosis is made, the responsible wound is debrided; if feasible, it is actually excised, to get rid of any possible contamination or seeding of spores in the depths of the tissues.

**Dougal M. Dollar:** In Dr. Aud's paper he spoke of pentothal in these cases. Since sodium pentothal is an especially short acting drug, I have never seen the value of it in tetanus. You can give avertin rectally and get the effect in five to ten minutes at the outside, and keep them down approximately six hours with one dose and repeat as indicated. We have had certain cases at the Children's Hospital kept under avertin fifteen days. The initial dosage is 90 mgm. per kilo, to be reduced later as indicated.

If these patients get careful nursing care, especially among the children, there will be no pulmonary cases to cause worry.

Of course, regarding this case with bromism there is nothing in the literature about that. We have treated some with avertin alone, no tetanus antitoxin after the time of injury, and they recovered. I do not know whether tetanus antitoxin has any value in the treatment but it does prevent the disease. I feel that avertin is best in the treatment.

**Emil K. Mosny:** About a year ago a case of tetanus was admitted to the Marine Hospital, appearing ten days after a crushing injury to the thumb. This patient came in with generalized convulsions. The first day he received approximately 100,000 units of tetanus antitoxin, consisting of 20,000 units intraspinally, 40,000 units intravenously, and 40,000 units intramuscularly. This did not seem to affect him in any way. Twenty-four hours later he received approximately another 20,000 units, and over a period of four days he received approximately 400,000 to 500,000 units of antitoxin. On the fourth day the patient died, despite the large amounts of antitoxin administered. Convulsions were treated to a certain extent with sodium amytal intramuscularly and choral hydrate per rectum.

Beckman states that antitoxin is practically of no value and the chief cause of death is pulmonary hemorrhage. When the patient develops severe convulsions a great many pulmonary alveoli are ruptured due to the increased intra-alveolar pressure which is produced by the combined spasm of the accessory respiratory muscles and the muscles of the glottis. The ruptured alveoli produce the pulmonary hemorrhage.

If you review the pathology, tetanus is supposed to travel along the lymphatics of the peripheral nerves. With injuries taking place in the lower extremities, the tetanus will have an incubation period much longer than when the injury is in the upper extremities or face. Thus injuries about the face or head are much more dangerous than those in the lower extremities.

Now as to the value of antitoxin intraspinally. About five or six years ago meningococcus anti-toxin and serum were given intraspinally. Archibald Hoyne of Chicago, stated that meningococcus anti-toxin intraspinally was probably of no value and therefore he gave the antitoxin and serum intravenously. Over a period of five or six years the results were just as good in the intravenous administration of meningococcus antitoxin and serum as that which has been administered intraspinally. The administration of antitoxin intravenously and intramuscularly would probably be just as effective if a similar analogy would be drawn from

the previous experience in the administration of meningococcus antitoxin and anti-serum.

**Guy Aud** (in closing): There are many interesting things regarding these cases of tetanus that I would have liked very much to have discussed had time permitted.

Dr. Sherrill's report of forty thousand injuries in the World War with the subsequent development of only four cases of tetanus is very interesting. I believe the results would be found to be almost as good in civil life if we could have accurate statistics on all cases that were properly treated and given tetanus antitoxin as was done in the army. In civil life those that do not develop tetanus do not return to tell us how well they have gotten along.

Firor and his co-workers have shown by their experimental work on dogs that once a lethal dose of tetanus toxin has become fixed in the tissues, no amount of tetanus anti-toxin will save such a dog. In order to cure patients suffering from tetanus it is necessary to neutralize the toxin before a lethal dose has become fixed in the tissues.

Dr. Mack brings up the question of a patient developing tetanus after the injured foot was amputated. I think this death can be explained by the work of Firor just described. Evidently a lethal dose of toxin had been liberated from the infected wound before it was amputated.

I fully agree with Dr. Hamilton in that the best protection we have against the development of tetanus is the early and complete debridement of all wounds. Such treatment is ideal and would, undoubtedly, reduce the incidence of this disease to practically nil.

It is rather generally recognized that if a patient is to be cured by the administration of tetanus antitoxin, such a result should be accomplished by not more than 250,000 to 300,000 units of antitoxin.

There are some very good surgeons and clinicians who do not give antitoxin in the prevention or treatment of tetanus, believing that it has little or no value.

I am very grateful for the generous discussion this brief report has received.

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In a large group of industrial workers the proportion of the cases of tuberculosis found in a minimal stage has almost trebled since 1929. Moderately advanced cases have decreased slightly and far advanced cases are about one-third the former proportion. This change is explained largely by the fact that in recent years fluoroscopic examinations of the chest (and roentgenograms when indicated) have been made prior to employment and as part of the annual routine examinations of all employees of the Metropolitan Life Insurance Company. From Bulletin of Met. Life Ins. Co.

## CLINICAL STUDY OF INTESTINAL PARASITES

H. H. INGLING, M. D.

Springfield, Ohio

This is the report of the work done at Pine Mountain, Harlan County, Kentucky, in the fall of 1939 through the cooperation of Sharp & Dohme, the Kentucky State Department of Health, and the Pine Mountain Health Association.

Literature is filled with accounts of many drugs and heroic treatments advised for the treatment of intestinal worms. The ridding of a patient of these worms has always been considered a serious procedure, and was usually begun by starvation and purging before administering the drug and then followed by further purging. This evidently was necessary in the past, as the commonly used anthelmintics were quite toxic, and there were not infrequent side effects. Although treatment for "worms" was a regular procedure of the family physician, a few fatalities have been reported, and Brown points out that definite signs of intoxication, severe injuries and even death, have followed without warning the administration of anthelmintics other than hexylresorcinol.

Fortunately, during the past several years extensive clinical work has been completed in sections infested with human parasites, and the work of Lamson, Faust, Brown, Robbins, Leonard, Feirer, and Stoll, have definitely established the value of crystalline Hexylresorcinol as an unusually safe and effective anthelmintic.

Lamson and his co-workers pointed out the unusual effectiveness of crystalline Hexylresorcinol as an anthelmintic together with its freedom from untoward symptoms following administration. They stated that hexylresorcinol given in crystalline form, in doses of 1.0 gm. to adults, and 0.5 gm. to children on an empty stomach in the morning and followed by a purge of magnesium sulphate in twenty-four hours removed between 95 and 100 per cent of the *Ascaris* worms, and no toxic symptoms have followed such administrations.

Faust and his co-workers emphasize that Hexylresorcinol is the drug of choice in the treatment of roundworms, and whipworms, but that the drug must be carefully administered. If pills containing caprokol are swallowed whole no toxic symptoms have been seen. Faust also found that Hexylresorcinol, as prescribed for ascariasis, is fairly efficient in remov-



ing tapeworm from the intestine, and is the drug of choice for small children harboring this worm. Since it is practically non-toxic, non-toxic treatments may be given within a relatively short time.

Brown in his experiences with the use of chrystalline Hexylresorcinol for the treatment of pinworm infestation, found it to be an efficient therapeutic agent.

Bercovitz gave a scientific exhibit on intestinal parasites at the A. M. A. Convention in June 1935, and advised the use of caprokol pills in the treatment of roundworms and pinworms, and later reported its value in the treatment of tapeworm.

These reports clearly demonstrate that crystalline hexylresorcinol is effective against *ascaris lumbricoides* (round worm), *Necator Americanus* (hookworm), *hymenolepis nana* (dwarf tapeworm) *dibothryocephalus* (fish tapeworm) and *enterobius vermicularis* (pinworm, seatworm, threadworm or whipworm). Furthermore, the parasites are killed outright, thus eliminating the danger of migration of the ascarids, which has sometimes caused death from intestinal obstruction, suffocation, etc., after the administration of other anthelmintics.

A group of one hundred thirty two Kentucky mountain rural grade school children were given routine microscopic stool examinations in order to determine the amount of intestinal parasitic infestation as evidenced by ova present. These children live in south-eastern Kentucky at an altitude of about twenty-five hundred feet above sea level and at about 37° north latitude in a rural district where sanitary conditions are bad. They all, of course, go barefooted in warm weather, drink well or spring water that is practically all polluted with surface drainage and use privies that drain on the surface of the ground.

Of the one hundred thirty two examined, forty-four were found free of parasites. Forty-two had *ascaris lumbricoides* alone. Five had *ascaris lumbricoides* associated with *necator americanus*. Eleven had *necator americanus* alone. Two had *hymenolepis nana* alone, two had *hymenolepis* associated with *ascaris trichiura*. Sixteen had *ascaris trichiura* alone, one had *ascaris trichiura* associated with *ascaris vermicularis*. Five had *ascaris trichiura* associated with *ascaris lumbricoides*. Two had the combination of *necator americanus*, *ascaris trichiura* and *ascaris lumbricoides*. One had *necator americanus* associated with *ascaris trichiura*, and one had *ascaris lumbricoides* associated with *hymenolepis*

*nana*.

It is likely that the ground and the surface water is kept contaminated with the ova or larvae of the various parasites because of the poor type of privies. This, thus makes drinking water, uncooked foods, and the ground itself, (through bare feet for the *necator americanus*) sources of infestation.

Prior to this study but under my observation some of these children demonstrated symptoms that necessitated medical supervision of the cases.

Case 1. M. C. male aged ten years, developed sudden fever, nausea, vomiting (of *ascaris lumbricoides*, and gastric fluid), nervousness and mental disturbances, temperature stayed around 100-102° F. for four days. There was no diarrhea. There was tenderness diffuse throughout the abdomen but no masses. Respiratory system was negative. The child was treated with rest, soft and liquid diet, antacids and sedatives until acute symptoms subsided at which time caprokol was given, followed by saline catharis with riddance of many *ascaris lumbricoides*. The child had been much underweight and weakly for months. His weight and strength improved greatly.

Case 2. B. B. male, aged eight years, came down with sudden illness, fever, vomiting, colicky abdominal pains, marked tenderness in both lower quadrants and prostration were present. Enemas relieved him of his symptoms and treatment with caprokol produced many dead *ascaris lumbricoides*.

Case 3. W. C. male, age ten years, was known to be harboring *ascaris lumbricoides* and *necator americanus*. He became suddenly ill with fever, vomiting (*ascaris lumbricoides* present in vomitus), severe headaches, signs of meningeal irritation and fright. Fever ranged from normal to 104° F. There was some abdominal soreness but this was not marked. Fever lasted for four days reaching the normal gradually. Patient was treated symptomatically until acute symptoms subsided at which time he was treated as case 1 and 2 ridding himself of the combined infestation after two treatments with caprokol.

Case 4. O. H. female, age twelve years, had no acute symptoms but had been dull in school for a long time. She was thin, weak, had a poor appetite, had weak abdominal musculature, was anaemic (Hb 70 per cent) and frequently was prone to "bed wetting." Iron and vitamin B complex therapy was given with some improvement but the greatest improvement

occured only after *ascaris lumbricoides* was discovered in the stools and treated adequately with two treatments of caprokol.

None of the cases later discovered to be harboring *necator americanus* presented symptoms that were severe enough to bring the patient to the doctor, although undoubtedly their presence was to some extent detrimental to the person's well being. Those harboring *ascaris trichiura*, *hymenolepis nana* and *ascaris vermicularis* presented no symptoms severe enough to bring them to the doctor.

We, as practicing physicians, are all acquainted with the anemia and the languor and fatigue that *necator americanus* produces, with the nervousness and gastric disturbances of *ascaris lumbricoides*, the pruritus of the anus and vulva due to *ascaris vermicularis* and the malnutrition associated with lassitude and indigestion due to the tapeworms. We frequently forget about them or disregard them in differential diagnosis and yet microscopic examination of the stool for the presence or absence of the ova is easily done.

Of the cases studied, nine harboring hookworm, thirty-two harboring round worm and five harboring the combination of the two were treated with caprokol. This was given in doses graduated as to the age or weight of the patient in the morning on an empty stomach. A regular meal was given at noon and regular food was from then on continued. Before breakfast the following morning a saline catharis was given to rid the patient of the dead worms. Caution was taken to avoid crushing of the pills in the patients' mouths to prevent the discomfort of slight mucous membrane ulcers. Slight nausea was felt by three patients. None vomited the medicine. None lost any time from school. Microscopic examinations were made of the stools one week after treatment. We found of the total forty-six thus treated thirty nine were free of the parasites after one treatment. Three harboring round worm were found not to be free in one treatment, but were free in two such treatments. Four all harboring hookworm were not free with one treatment and unfortunately we were unable to contact them again for a second treatment.

An attempt was made to prevent reinfection of those freed of their parasites by advising them to build sanitary privies with deep vaults properly walled off, by advising them to seal their well off from surface drainage, advising them from eat-

ing uncooked and unwashed vegetables and from going bare footed.

#### RESULTS

No parasites	44-33%
<i>Ascaris lumbricoides</i> (round worm)	42-32%
<i>Ascaris lumbricoides</i> and <i>necator americanus</i> (round worm and hook worm)	5-3.8%
<i>Necator americanus</i> (hookworm)	11-8.3%
<i>Hymenolepis nana</i> (dwarf type)	1-0.8%
<i>Ascaris trichiura</i> and <i>hymenolepis</i> (whip worm and dwarf type)	2-1.5%
<i>Ascaris trichiura</i> (whip worm)	17-13%
<i>Ascaris trichiura</i> and <i>ascaris vermicularis</i> (whip worm & pin worm)	1-0.8%
<i>Ascaris trichiura</i> and <i>ascaris lumbricoides</i> (whip worm and round worm)	5-3.8%
<i>Necator americanus</i> , <i>ascaris trichiura</i> and <i>ascaris lumbricoides</i> (hookworm, whip worm and round worm)	2-1.5%
<i>Necator americanus</i> and <i>ascaris trichiura</i> (hookworm and whip worm)	1-0.8%
<i>Hymenolepis nana</i> and <i>ascaris lumbricoides</i> (dwarf type and round worm)	1-0.8%
<i>Hymenolepis nana</i> (dwarf type)	1-0.8%
Combined and single hookworm infestation.	19-15%
Combined and single round worm infestation	55-42%

#### SUMMARY

1. One hundred thirty two Kentucky rural mountain grade school children examined for ova of intestinal parasites in the stools.

2. Of thirty-two harboring *ascaris lumbricoides*, twenty-nine were freed of their parasites with one treatment of caprokol pills, and three were freed in two treatments.

3. Nine harboring *necator americanus* were treated with caprokol pills. Five were freed in one treatment, the remaining four still harbored some parasites but further treatment was not done.

4. Five with combined infestations received caprokol pills and all were freed in one treatment.

5. No time was lost from school during treatment.

6. Three complained of slight nausea.

7. Caprokol pills appear to be a very safe and adequate treatment for *ascaris lumbricoides* and *necator americanus*.



# Kentucky Medical Journal

Published Monthly By  
THE KENTUCKY MEDICAL ASSOCIATION  
Incorporated

Entered as second class matter October 22, 1906, at the Postoffice at Bowling Green, Ky., under act of Congress, March 8, 1879.

Subscription Price .....\$5.00  
Edited Under the Supervision of the Council

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NEXT MEETING LOUISVILLE

SEPTEMBER 29—OCTOBER 3, 1941

## COUNTY SOCIETY REPORTS

**Allen:** The Allen County Medical Society lost one of its most valuable members, Charles W. Holland, Scottsville, who died April 20th, of coronary occlusion. For the last ten years he rendered valuable service to this community as health officer, and was former president and a constant attendant of the society.

A. O. MILLER, Secretary.

**Boyle:** Next meeting March 18, at 6 p. m. Room 212 Gilcher Hotel for social hour. Dinner at 7 p. m. rooms 209-210. All members of this society will pay \$1.00 per plate. For all visiting physicians and dentists from other counties there will be no charge for dinner. Program at 8 p. m. at the Doctor Ephraim McDowell Memorial Hospital as follows: Obstetrical Difficulties in Home Delivery, John E. Edwards, Lancaster; Common External Inflammations of the Eye, A. H. Walker, Danville; A Very Interesting Case Report, McAtee, Stanford; Vincents Disease, Horace Squifflett, Harrodsburg; Some Public Health Problems, Edward Humphrey, Harrodsburg; An Un-announced Subject, Popplewell, Jamestown. These papers will be limited to 15 minutes each, with 5 minutes discussion. A real treat is in store for us and you will be the loser if you are not present. Good Fellowship, Good Dinner, Good Program.

P. C. SANDERS, Secretary.

**Campbell-Kenton:** The regular meeting of the Campbell-Kenton County Medical Society was held on Thursday, April 3rd, at St. Elizabeth's Hospital, with thirty members present.

The speaker of the evening was Joseph C. Bell, of Louisville, who gave a very instructive and interesting talk on X-ray examination of the gastro-intestinal tract, with slides made from his X-ray films to illustrate the talk.

Following the scientific paper, the regular business session was called to order by the President, Clay Crawford. The minutes of the previous meeting were read and approved.

The applications of George Burger and Leo Davidson for membership in the Society were unanimously approved by secret ballot.

W. R. Miner gave a report on the work of the National Physicians Committee for Medical Service, and distributed literature pertaining to this work.

Luther Bach read a communication from A. T. McCormack regarding the proposed Medical Census of the State for the purpose of finding out the number of physicians available for emergency work under the National Defense Program.

Clay Crawford read a letter from the Northern Kentucky Food Handlers Association asking that the Medical Society go on record again as opposing the Food Handlers Ordinance. It was

moved and passed by the Society that a copy of the previous resolution opposing the present ordinance be sent out again to the proper authorities, and that the Society go on record as expressing their willingness to co-operate in drawing up a more satisfactory plan of health supervision.

The meeting was adjourned until the next regular meeting to be held on May 1st, at Speers Hospital, Dayton.

W. V. PIERCE, Secretary.

**Campbell-Kenton:** The regular meeting of the Campbell-Kenton County Medical Society was held at Speers Memorial Hospital, Dayton, on Thursday, May 1, 1941. Thirteen members were present.

The meeting was called to order at 9:40 p. m. by the president, Clay Crawford. The minutes of the last meeting were read and approved.

The secretary read a communication from A. T. McCormack, relative to the matter of the payment of State and County dues by members of the local society who are away on duty with the Army. It was moved by Stuart Biltz and seconded by Hadley Caldwell that a new classification be made for these men and that they be listed as inactive members; as such to be exempted from the payment of dues while in service; and that on their return to this society they shall again become active members by the payment of the current year's dues. The motion was passed unanimously.

Clay Crawford read a communication from the National Red Cross asking the doctors to aid in securing nurses to volunteer for Red Cross work.

George Hermann made an announcement concerning the Licking Valley meeting to be held at Falmouth, on May 15th, 1941.

W. R. Miner offered his resignation as a member of the committee on Public Relations and of the National Physicians Committee for the Extension of Medical Service. The resignation was accepted. J. D. Northcutt and Luther Bach were appointed to this committee.

W. V. Pierce read a paper on Prostatism and its Treatment. Discussion by William Miner.

The meeting was adjourned.

W. V. PIERCE, Secretary.

**Daviess:** The regular dinner meeting of the Daviess County Medical Society was held at Owensboro Country Club March 11th. J. J. Ashby, Nashville, read a paper entitled Present Day Treatment of Fractures of the Upper End of the Femur. The discussion was opened by I. J. Hoover. On March 25th, the society held a dinner meeting at Hotel Owensboro. J. Duffy Hancock and Jesshill Love, Louisville, gave an interesting report in connection with Cancer. The

following physicians have entered Military Service: James Hix, John Dixon, Lee Tyler, Haynes Barr and R. S. Sumner.

THOMAS H. MILTON, Secretary.

**Daviess:** The regular meeting of the Daviess County Society was held April 8, 1941, at the Owensboro Country Club. Twenty members were present. Thomas H. Milton presented a paper on Problems of Menstrual Disorder. On April 22, the meeting of the society was held at the Owensboro Country Club. Eighteen members were present. J. D. Stewart presented a paper on Occipito-Posterior Position. Dr. Alice Whittinghill Davis, age 33, expired April 27th, at Owensboro at the Daviess County Hospital with toxemia of pregnancy. Dr. Davis was a very active society member and specialized in pediatrics and obstetrics.

THOMAS H. MILTON, Secretary.

**Grant:** The Grant County Medical Society met in the office of the Grant County Health Department on Monday evening, March 10th, at 8:00 p. m. Members present were: C. M. Eckler, P. E. Harper, J. T. Davis, B. E. Sugarman and Lenore Patrick.

The program for the evening included a talk by John B. Floyd of the State Board of Health on The Diagnosis of Tuberculosis, and E. J. Murray on the Treatment of Tuberculosis. In Floyd's talk numerous X-ray films were presented and interesting cases were reviewed.

It was reported at the meeting that Maurice Hyman, from Crittenden, had been called to Military Service as a Reserve Officer, and that R. E. Kinsey who has been critically ill in Christ Hospital in Cincinnati, has much improved and would be able to return home soon.

LENORE PATRICK, Secretary.

**Harrison:** The Harrison County Medical Society held its regular monthly meeting April 7, 1941, at The Harrison Memorial Hospital.

Members and visitors present were: Drs. Rees, Blount, Todd, Moody, Wyles, Smiser, Loftin, W. B. Moore, McMurtry and Swinford. Drs. John W. Scott and Thornton Scott, Lexington.

The meeting was called to order by the Vice-President, R. L. Loftin. The minutes of the last meeting were approved as read.

The Society unanimously approved a motion instructing the Secretary to extend a cordial invitation to Dr. Foley to conduct a tuberculosis clinic in Harrison County at the earliest time convenient to him.

H. T. Smiser reported a case of a woman fifty years of age, which he diagnosed as a gall-bladder case. Upon opening the abdomen the gall-bladder proved to be normal but in the abdominal muscles there was found a tumor of necro-



tic tissue. There was no history of injury in this case; furthermore, the center of the tumor revealed a blood clot. A laboratory report showed no evidence of malignancy.

H. L. Loftin reported a pre-natal case of a woman seven months pregnant, who developed a sudden pain in the right abdomen with a temperature range from 101 to 103; respiration 40; white blood count, 16,000. Operation was performed but no pathology found in the appendix or any other organs. The urinary findings were negative and a diagnosis was not established. This case was discussed by Drs. McMurtry, J. W. Scott, Thornton Scott and J. M. Rees.

Thornton Scott read a very interesting paper on Epilepsy. The paper was discussed by Drs. John W. Scott, J. P. Wyles and J. M. Rees.

M. J. McNeely, Berry, has removed his residence to Dillsboro, Indiana, where he will be medical supervisor of a sanitorium. Our president will be greatly missed in our community. Meeting adjourned.

W. B. MOORE, Secretary.

**Henry:** At a meeting of the Henry County Medical Society held in the office of the Secretary, April 10th, those present were: M. Bell, F. D. Hancock, O. P. Chapman, G. E. McMunn, W. P. McKee and Owen Carroll.

Mr. McNeill addressed the Society, explaining a plan for the collection of physicians' fees from those who take a membership in a proposed organization which concerns those in the lower bracket, financially, and insures them of necessary medical attention. The organization is to be confined to Henry County.

The Society appointed Owen Carroll to contact all physicians to recommend a treasurer for the fund already paid in and funds that will accumulate from incoming members.

The speaker of the evening was Dr. Synder of Frankfort, who addressed the Society on diseases of the ear, especially those that can be treated by the general practitioner.

There was a general discussion by all present. The meeting was voted as very instructive and entertaining, lasting an hour longer than our usual meetings.

The Society meets next on the second Thursday evening in May at 7:30 p. m.

OWEN CARROLL, Secretary.

**Hopkins:** The Hopkins County Medical Society met at the hospital at 6:30 p. m., April 10th, 1941. A buffet lunch was served.

The question of a full time laboratory technician was discussed and the opinions expressed were favorable to this proposal. The laboratory facilities will be available to all physicians at the laboratory fee. A proposal by the County Health Department to expand its laboratory to make

Kahn tests was rejected since it was felt that the hospital will be able to supply this need and at the same time keep practice in the hands of the private physician.

Two excellent papers were presented by Wm. F. Stucky, Dawson Springs, on Old and New Remedies, and A. W. Davis, Madisonville, on Sulfonamide Drugs.

Those present were: J. E. Haynes, F. A. Scott, Wm. Garnier, J. R. Corum, A. W. Davis, C. R. Morton, C. H. Foshee, F. P. Strother, M. S. Veal, T. R. Finley, A. F. Finley, D. L. Salmon, I. J. Thomas, Wm. F. Stucky, C. J. Morris, J. D. Sory and W. M. Hammack.

WILLIAM F. GARNIER, Secretary.

**Jefferson:** The 826th stated meeting of the Jefferson County Medical Society was held Monday evening, April 7, with 89 members present. The President called the meeting to order at 8:10 p. m.

The Secretary read the minutes of the previous meeting and they were approved as read.

The Secretary read a letter from Malcolm M. Stanley, President of the local chapter of Alpha Omega Alpha inviting the members of this society to attend the sixteenth annual Alpha Omega Alpha lecture on Friday, April 11, at 3:30 p. m., to hear Dr. Irvine Page of Indianapolis, who is to speak on some phase of his recent researches in the field of Renal Hypertension.

The Secretary read an editorial, The A. M. A. Needs a New Charter, from the Chicago Tribune of April 7 and sent to him by Herman Mahaffey.

The Secretary read a letter from George Glenn Hatcher, Secretary of State, Commonwealth of Kentucky regarding the Process Agent of this Society.

Misch Casper moved that this be referred to the Executive Committee with the power to act upon it. Motion seconded and passed.

The Secretary read an application for employment from Miss Ruth Victor. Motion that this be filed duly made, seconded and passed.

W. B. Troutman, Chairman of the Program Committee, announced that the program is completed up to the summer vacation with the exception of the last meeting i.e., the second one in June. Since the attendance of this meeting usually falls off, it was decided to suggest a get-together meeting, perhaps a barbecue, for this last meeting, and to stress the social side. W. B. Troutman made a motion to this effect. Seconded by J. B. Lukins. Motion passed.

Laman Gray of the Professional Service announced that fourteen of the younger men were making the examination for National Youth Administration at the rate of two dollars per hour, with very complete examinations being made. About two hundred have been examined. Most of the men think the work interesting and a good

review to do the examination. Laman Gray thinks it would be interesting at a later date to have the examiners give a report on the work. It is remarkable how many serious cases they are finding, one very severe case of diabetes, and all have bad teeth. The National Youth Administration asked for a list of colored physicians to examine the colored people. Laman Gray has had no report from them at this time.

R. A. Bate read the reports of the Necrology Committee on the deaths of R. R. Elmore and Louis Frank. The members stood while the reports were being read.

It was moved, seconded and passed that these reports be accepted and filed.

Byron Bizot moved that the Society spend two dollars or so for a slate blackboard so that the names of physicians wanted on the phone could be more easily written and read. Motion seconded and passed.

New members elected to the Society are: Roy E. Bingham and Charles Otis Neff.

The scientific program began at 8:40 p. m.

Case Reports: Ulcerative Colitis, Vincent's Infection as the Probable Etiological Factor, Roland L. McCormack. Report on More than One Hundred Cases of Perforated Peptic Ulcers, R. Arnold Griswold.

Discussions by M. J. Henry, Misch Casper, J. Duffy Hancock, Virgil Simpson, D. Y. Keith and closing remarks by R. Arnold Griswold.

Sound Motion Picture: When Bobby Goes to School, produced by the American Academy of Pediatrics distributed by Mead Johnson and Company.

The meeting adjourned at 9:50 p. m.

B. WILSON SMOCK, Secretary.

**Jefferson:** The 827th stated meeting of the Jefferson County Medical Society was held Monday evening, April 21, with 68 members present. The President called the meeting to order at 7:55 p. m.

The Secretary read the minutes of the previous meeting and they were approved as read.

The President announced that a slate blackboard had been ordered, pursuant to the motion passed at the last meeting.

The Secretary read a letter from the Medical Certified Milk Commission regarding the advisability of discontinuing the production of certified milk. The Commission recommends that a carefully supervised Certified Raw Milk should be made available to the public, but that the certification of pasteurized milk should be discontinued.

James H. Pritchett moved that the Society endorse the recommendation of the Commission. Motion seconded and passed and disposition of the matter left to the Milk Commission.

R. A. Bate, Sr., of the Necrology Committee

read that committee's resolutions on the death of Claude T. Wolfe, during the reading of which the members stood in tribute. E. L. Henderson moved their adoption, a copy to be spread upon the minutes and one to be sent the bereaved family. Motion seconded and passed.

The Secretary read a letter from J. A. Nieman of Parke, Davis and Company, inviting the members of the Society to spend two days as the guests of the Company in Detroit to visit their Pharmaceutical and Biological Laboratories, the expense of the trip while in Detroit to be covered by the company.

Mr. Nieman, who was present, stated the company was anxious for as many of the doctors as possible to make the trip, the dates to be chosen by the members of this Society. They would like to have at least twenty men make the trip.

The President stated that the Society as a whole would not want to take action on this.

Scientific Program: 8:15 p. m.

Case Report: Unusual Case of Intestinal Obstruction. Frank P. Strickler, M. D.

Clinical Considerations of the Climacterium. Leo W. Zimmerman, M. D. Discussed by Doctors R. A. Bate, Sr., and R. A. Bate, Jr., with closing remarks by Dr. Zimmerman.

Carbon Monoxide Asphyxia. (Lantern Slides), R. Douglas Sanders, M. D..

Discussed by Doctors A. R. Bizot, James S. Lutz, R. A. Bate, Sr., C. S. Eddleman and Robertson O. Joplin, with closing remarks by Doctor Sanders. The meeting adjourned at 9:40 p. m.

W. B. SMOCK, Secretary.

**Jefferson:** The 828 stated meeting of the Jefferson County Medical Society was held Monday evening, May 5, with 59 members and guests present. The President called the meeting to order at 8:25 p. m.

The Secretary read the minutes of the previous meeting and they were approved as read.

The secretary read an announcement of the Hospital nurses' commencement on Monday, May 12.

New members elected to membership are: David A. Bates, Claude G. Eccles, Isham Kimbell, Edward Everett Landis, J. B. Patterson and Houston W. Shaw.

The Secretary read applications for employment from Miss Margaret King and Mrs. Ted R. Eversole. These will be posted on the bulletin board.

Scientific Program began at 8:32 p. m.

Case Report: "Pneumococcic Meningitis." John Stites.

Because of illness, W. E. Fallis was unable to read his paper, "Primary Bilateral Adenocarcinoma of Breast."

"Trichinosis, with Case Report." James E. Winter. Discussed by Hugh R. Leavell and F. W.



Caudill with closing remarks by J. E. Winter.

The President spoke of the timeliness of the next program on "Military Medicine" and hoped the guest speakers, who belong to the Medical Corps of the U. S. Army, would be honored with a large attendance. The Society adjourned at 9:10 p. m.

W. B. SMOCK, Secretary.

**Laurel:** At the regular meeting of the Laurel County Medical Society the following resolutions were adopted:

WHEREAS, the Laurel County Medical Association of London, Kentucky, has lost by death one of its most earnest and active members and laborers, Dr. George Simeon Brock, who on March 6, 1941, passed into that great Eternity prepared for those who love the Lord.

WHEREAS, his passing is a lost link from our Medical Association, which has always found him not only a great and good man, from the standpoint of the civic community, but also a brother, counselor, friend and advisor, whose every trait was that which demanded, and qualified him for the love and respect shown him by all who knew him. So great was his love for his profession and colleagues, that the interest and welfare of either was never found wanting. Therefore, be it

RESOLVED, that we bow in humble submission to the will of Him Who doeth all things for the best, and that we extend to the sorrowing family our heartfelt sympathy, with the prayer that God's richest blessings will rest upon them and that His grace will abide with them. Therefore, be it further

RESOLVED, that a copy of these Resolutions be spread on the Minutes of the Laurel County Medical Association; that a copy be given to his widow, Mrs. Nancy Fouts Brock; that a copy be printed in the Sentinel-Echo; and that a copy be sent for publication to the Kentucky Medical Journal.

Signed:

J. W. CROOK, President,

OSCAR D. BROCK, Secretary.

**Licking Valley:** The Licking Valley Medical Society, composed of the counties of the Eighth Councilor District, met at Erlanger, March 13th, with a small attendance.

Frank Mayfield, M. D., of Cincinnati, lectured on Low Back pain in relation to fractured intervertebral disc. Dinner was served at noon.

At the business meeting W. R. Houston of Erlanger was elected President, and George Herman of Newport, was elected Secretary and Treasurer.

The next meeting is to be held at Falmouth, Kentucky, on May 15, 1941.

GEORGE HERMAN, Secretary.

**Madison:** The regular meeting of the Madison County Medical Society was held at the Trachoma Hospital, Thursday evening, April 17.

Wilson F. Dodd, President, presided with the following members present: Robert Sory, C. J. Armstrong, Max E. Blue, A. M. Carr, Paul A. Wright, A. F. Cornelius, W. F. Dodd, J. H. Rutledge, J. C. Baker, O. F. Hume and Robert L. Rice.

The meeting was called to order by the president at 7:55 p. m. and the minutes of the previous meeting read and approved.

Scientific Session: A. F. Cornelius gave a very interesting talk on the Automatic Nervous System, followed by discussion. J. H. Rutledge gave a short talk on an interesting article in the Journal of the American Medical Association concerning blood transfusion, followed by discussion.

New Business: J. H. Rutledge made a motion that the June meeting to be held in Berea, as has been the custom in the past. The meeting to be a dinner meeting for doctors and their wives. The place to be decided by the committee. Motion seconded by A. M. Carr and carried unanimously. Meeting adjourned at 9:00 p. m.

ROBERT L. RICE, Secretary.

**McCracken:** At the regular meeting of the McCracken County Medical Society the following officers were elected: J. Ewing Dunn, President; William Eaton, Vice-President; E. W. Jackson, Treasurer, and Leon Higdon, Secretary. The Society meets the fourth Wednesday of each month. On February 26th we enjoyed a splendid paper on the subject of The Treatment of Pneumonia in Children by Harry S. Andrews, Louisville.

LEON HIGDON, Secretary.

**Tri County:** The Tri County Medical Society met at Lebanon, 7:30 p. m., on March 27th, with a dinner meeting. The program consisted of a paper on Tuberculosis in Kentucky, by V. E. Simpson, and Intestinal Obstruction by M. J. Henry, Louisville. Thirty physicians were present from Marion, Taylor, Adair and Washington Counties.

W. E. OLDHAM, Secretary.

**Union:** The Union County Medical Society held its regular monthly meeting Tuesday night, April 8th, at the Kentucky Hotel. Following a delightful meal the meeting was called to order and the regular items of business were enacted. The Medical Society went on record as in favor of asking the county to appropriate sufficient funds to secure the services of an additional nurse for the county health unit.

W. H. Hardesty of Waverly and J. C. Watkins of Uniontown were given Honorary Life Mem-

bership in the society. It was decided to invite Philip F. Barbour of Louisville to hold a clinic for unusual medical cases in children here in Morganfield, May 6th.

John Floyd of Richmond brought a very interesting discussion of Tuberculosis to the society. He pointed out that it takes all of us and more especially the medical profession working together to control this disease.

There are over 100 cases of tuberculosis in this county and why are we not more disturbed about it. He also gave a discussion of the proposals to be made to the State Legislature next spring.

Mr. McLain, medical student from Sturgis, and A. B. Colley, Webster County Health Director, were welcome visitors.

BRUCE UNDERWOOD, Secretary.

**Union:** The Union County Medical Society met Tuesday night, May 6, at the Kentucky Hotel, Morganfield, and was addressed by Dr. Philip F. Barbour, Pediatrician, Louisville, on the subject of Summer Diarrheas in Babies. W. W. Nicholson, Louisville, addressed the society on the subject of Newer Drugs in the Treatment of Pneumonia. The society sponsored the clinic for children that was held at the Methodist Church Tuesday afternoon, May 6th. Drs. Rhea, Calley, Nall and Dr. Cottingham, dentist, were welcome visitors.

BRUCE UNDERWOOD, Secretary.

### NEWS ITEMS

Dr. and Mrs. Andre Crotti have the honor of announcing the marriage of their daughter, Mary Elizabeth, to Dr. Maurice Gray Buckles, Louisville, Wednesday the thirtieth of April, at Columbus, Ohio.

The Second American Congress on Obstetrics and Gynecology will be held in St. Louis, April 6 to 10, 1942. All of these meetings and both the Commercial and Educational and Scientific Exhibits will be held in the Public Auditorium. The general plan for the program will be much the same as that of the first Congress, which was held in Cleveland in 1939. Those who are interested in further knowledge of this meeting please address your letter to the Chicago office of the Congress, at 650 Rush Street, Chicago.

Robert G. Falls, age 78, who practiced medicine in Louisville for fifty-nine years, died Monday, May 12th. He was a native of Carroll County, and graduated from the University of Louisville School of Medicine in 1882, and did post-graduate work at the old Hospital College of Medicine. For 20 years he was on the faculty of the latter institution.

Doctor George C. Goodman, Paint Lick, Kentucky, died at the Norton Infirmary, Louisville, May 9th. He was a native of Welchburg, and graduated in 1890 from the University of Louisville School of Medicine, and practiced in eastern Kentucky before going to Paint Lick twenty-two years ago.

The Michael Reese Hospital, Chicago, offers a full-time intensive two weeks course in Electrocardiography August 18-30 by Dr. Louis N. Katz. This course is offered to the general practitioner and there will be practice on several electrocardiographic machines and discussion of the principles of their construction and use. There will be sessions on interpretations of electrocardiograms illustrated by lantern slides, and practice by the student with unknown records. The course is \$100.00 and further information can be obtained by writing to Michael Reese Hospital, Cardiovascular Department, 29th and Ellis Avenue, Chicago.

### BOOK REVIEWS

**FIRST AID IN EMERGENCIES**—By Eldridge L. Eliason, A. B., M. D., Sc. D., F. A. C. S., Professor of Surgery, University of Pennsylvania School of Medicine, Professor of Surgery, University of Pennsylvania Graduate School of Medicine; Surgeon University of Pennsylvania, Presbyterian and Philadelphia General Hospitals. Tenth Edition. Completely revised and reset, 126 illustrations. J. B. Lippincott Company, Philadelphia, Publishers. Price \$1.75.

This book on first aid was not designed for physicians or medical students but for such groups as firemen, policemen, life guards, Boy Scouts, automobilists and others. This is the tenth edition. The book is pocket size.

A review of the chapter headings gives an indication of the material covered. The first chapter covers the handling and transportation of the patient, and the second covers infection, disinfection, sterilization, dressings, bandages and bandaging. Other chapters cover wounds, hemorrhages, effects of heat and cold, sprains, dislocations and fractures. Other subjects covered are unconscious conditions, fits and convulsions, suffocation and poisons, medical emergencies and infectious transmissible diseases. An index makes the book useful for quick reference.

This book will serve as a dependable guide to those groups for whom it was written.





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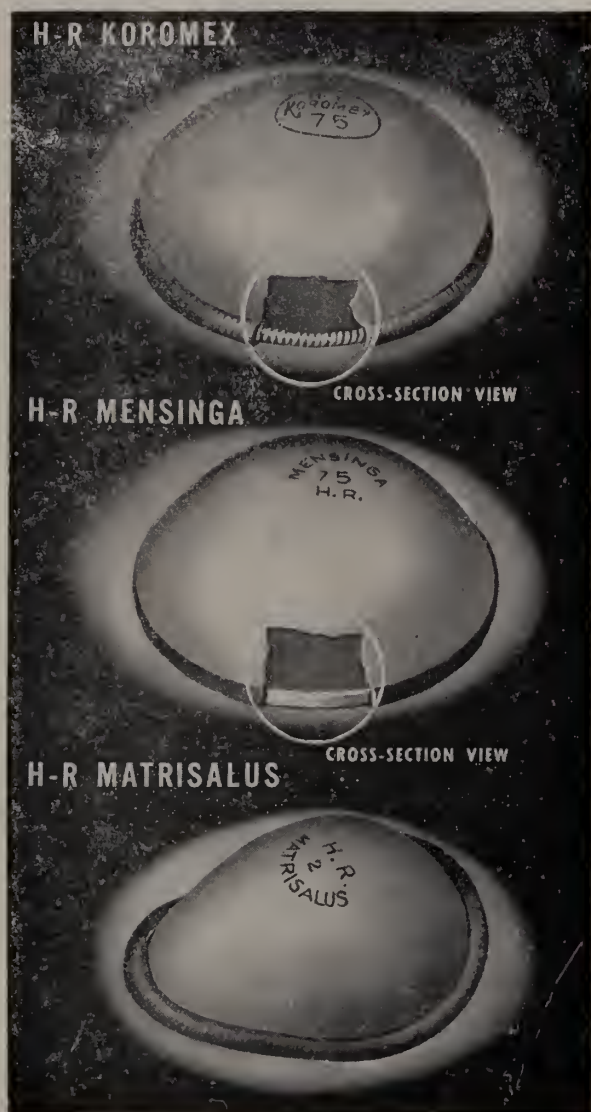
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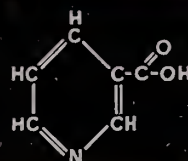
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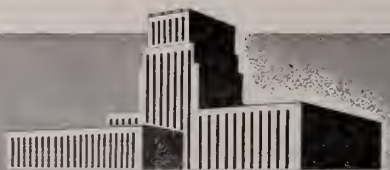
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## Are the Neuritic Symptoms of Pregnancy *due to a deficiency* of vitamin B<sub>1</sub> (thiamine)?

**S**UCH common neuritic symptoms of pregnancy as pains in arms and legs, muscle weakness, and (less frequent but more serious) paralysis of the extremities may result from a shortage of antineuritic vitamins, recent investigations appear to show. Although neuronitis of pregnancy has long been considered a toxemia, no toxins have ever been identified.

Clinical observations of Strauss and McDonald lead to the conclusion that the condition is a dietary deficiency disorder similar to beriberi, caused by lack of vitamin B<sub>1</sub>. They report recovery in their cases receiving this therapy, including dried brewers' yeast.

### *Hyperemesis as Cause of Avitaminosis*

Wechsler observes that all cases of polyneuritis of pregnancy recorded in the literature were preceded by long periods of severe vomiting. "It would seem," he adds, "that because of actual starvation these patients suffered from avitaminosis and consequent neuritis," a view likewise held by Hirst, Luikart, and Gustafson. Plass and Mengert observe that the practice of giving high carbohydrate feedings for hyperemesis gravidarum is still more likely to cause avitaminosis.

Dried brewers' yeast, as it is far richer than any other food in vitamin B<sub>1</sub> (thiamine), is being used with benefit both in the prevention and treatment of polyneuritic symptoms of pregnancy. Lewy found that additions of yeast to the diet reduced electric irritability of the peripheral nerves and brought clinical improvement. Vorhaus states that he and his associates, after administering large amounts of vitamin B<sub>1</sub> (thiamine) to 250 patients having various types of neuritis, including that of pregnancy, observed in about 90% of cases "varying degrees of improvement, i.e., from partial relief of pain to complete disappearance of all symptoms."

### *Need for Vitamin B<sub>1</sub> (thiamine) in Lactation*

Evans and Burr, Hartwell, Sure and co-workers, and Macy *et al* are among numerous authorities who find that the nursing mother also needs a supplement of vitamin B<sub>1</sub> (thiamine) from 3 to 5 times the normal requirement. It is accepted that during pregnancy and lactation the requirement for vitamin G (riboflavin) is increased.



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ACADEMY  
OF MEDICINE  
JUL 14 1941

Published Monthly by the Kentucky State Medical Association Under the Supervision of the Council

VOL. 39, No. 7

BOWLING GREEN, KY.

JULY, 1941

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<sup>1</sup> Cooke, R. A., and Stull, A.: *J. Allergy* 4: 87, 1933.

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

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Adair.....	Todd Jefferies .....	Columbia .....	July 2
Allen.....	A. O. Miller .....	Scottsville .....	July 23
Anderson.....	J. B. Lyen.....	Lawrenceburg .....	July 7
Ballard.....	F. H. Russell.....	Wickliffe .....	
Barren.....	R. E. Hayes.....	Glasgow .....	July 16
Bath.....	H. S. Gilmore.....	Owingsville .....	July 14
Bell.....	Edward S. Wilson.....	Pineville .....	July 11
Boone.....	R. E. Ryle .....	Walton .....	July 16
Bourbon.....	B. N. Pittenger.....	Paris .....	July 17
Boyd.....	R. H. Gardner .....	Ashland .....	July 1
Boyle.....	P. C. Sanders.....	Danville .....	July 15
Bracken-Pendleton.....	W. A. McKenney.....	Falmouth .....	July 24
Breathitt.....			July 15
Breckinridge.....	John E. Kincheloe .....	Hardinsburg .....	
Bullitt.....	George B. Hill.....	Mt. Washington .....	
Butler.....	D. G. Miller, Jr.....	Morgantown .....	July 2
Caldwell.....	W. L. Cash.....	Princeton .....	July 1
Calloway.....	J. A. Outland.....	Murray .....	
Campbell-Kenton.....	W. V. Pierce.....	Covington .....	
Carlisle.....	E. E. Smith.....	Bardwell .....	July 4
Carroll.....	H. Carl Boylen.....	Carrollton .....	July 11
Carter.....	Don E. Wilder.....	Grayson .....	July 11
Casey.....	Wm. J. Sweeney .....	Liberty .....	July 27
Christian.....	Geo. E. Pryor.....	Hopkinsville .....	July 18
Clark.....	Robert E. Strobe.....	Winchester .....	July 21
Clay.....	L. H. Wagers.....	Manchester .....	
Clinton.....	S. F. Stephenson.....	Albany .....	July 19
Crittenden.....	C. G. Moreland.....	Marion .....	July 14
Cumberland.....	W. Fayette Owsley.....	Burkesville .....	July 2
Daviess.....	T. H. Milton.....	Owensboro .....	July 8 & 22
Elliott.....	W. H. Joyner (Acting).....	Sandy Hook .....	
Estill.....	Virginia Wallace.....	Irvine .....	July 9
Fayette.....	Douglas E. Scott.....	Lexington .....	July 15
Fleming.....	Roy Orsborn.....	Flemingsburg .....	July 9
Floyd.....	Robert M. Sirkle.....	Weeksbur .....	July 30
Franklin.....	Thomas P. Leonard.....	Frankfort .....	July 3
Fulton.....	M. W. Haws.....	Fulton .....	July 9
Gallatin.....			July 17
Garrard.....	J. E. Edwards.....	Lancaster .....	July 17
Grant.....	Lenore Patrick .....	Williamstown .....	July 16
Graves.....	H. H. Hunt.....	Mayfield .....	July 1
Grayson.....			
Green.....	S. J. Simmons.....	Greensburg .....	July 7
Greenup.....	L. C. Bate.....	Greenup .....	July 11
Hancock.....	F. M. Griffin.....	Hawesville .....	July 7
Hardin.....	D. E. McClure.....	Elizabethtown .....	July 10
Harlan.....	M. W. Howard.....	Harlan .....	July 19
Harrison.....	W. B. Moore.....	Cynthiana .....	July 7
Hart.....	Maher Speevack.....	Munfordville .....	July 1
Henderson.....	J. Leland Tanner.....	Henderson .....	July 14 & 28
Henry.....	Owen Carroll.....	New Castle .....	
Hickman.....	H. E. Titsworth.....	Clinton .....	July 3
Hopkins.....	Wm. H. Garnier.....	Madisonville .....	July 10
Jackson.....	Mary T. Arnold.....	McKee .....	July 5
Jefferson.....	B. W. Smock.....	Louisville .....	
Jessamine.....	J. A. VanArsdall.....	Nicholasville .....	July 24
Johnson.....	A. D. Slone.....	Paintsville .....	July 28
Knott.....			July 26
Knox.....	T. R. Davies.....	Barbourville .....	July 17
Larue.....			
Laurel.....	Oscar D. Brock.....	London .....	July 9
Lawrence.....	L. S. Hayes.....	Louisa .....	July 21
Lee.....	A. B. Hoskins.....	Beattyville .....	July 12
Leslie.....	John H. Kooser.....	Hyden .....	
Letcher.....	F. D. Willey.....	Jenkins .....	July 29
Lewis.....			July 21
Lincoln.....	Lewis J. Jones.....	Hustonville .....	July 18
Livingston.....	J. O. Nall .....	Smithland .....	
Logan.....	E. M. Thompson.....	Russellville .....	
Lyon.....	H. H. Woodson.....	Eddyville .....	July 1
McCracken.....	Leon Higdon.....	Paducah .....	July 23
McCreary.....	R. M. Smith.....	Stearns .....	July 7
McLean.....	Allen R. Will.....	Calhoun .....	July 10
Madison.....	Robert L. Rice.....	Richmond .....	July 17
Magoffin.....			
Marion.....	W. E. Oldham.....	Lebanon .....	July 22
Marshall.....	S. L. Henson.....	Benton .....	July 16
Martin.....			

COUNTY	SECRETARY	RESIDENCE	DATE
Mason.....	C. W. Christine.....	Maysville.....	July 9
Meade.....	S. H. Stith.....	Brandenburg.....	July 24
Menifee.....	E. T. Riley.....	Frenchburg.....	
Mercer.....	J. Tom Price.....	Harrodsburg.....	July 8
Metcalfe.....	E. S. Dunham.....	Edmonton.....	
Monroe.....	George E. Bushong.....	Tompkinsville.....	
Montgomery.....	D. H. Bush.....	Mt. Sterling.....	July 8
Morgan.....			
Muhlenberg.....	E. L. Gates.....	Greenville.....	July 8
Nelson.....	R. H. Greenwell.....	Bardstown.....	
Nicholas.....	T. P. Scott.....	Carlisle.....	July 21
Ohio.....	Oscar Allen.....	McHenry.....	July 2
Oldham.....			July 8
Owen.....	K. S. McBee.....	Owenton.....	July 3
Owsley.....	W. H. Gibson.....	Booneville.....	July 7
Perry.....	Lewis C. Coleman.....	Hazard.....	July 14
Pike.....	F. H. Hodges.....	Pikeville.....	July 1
Powell.....	I. W. Johnson.....	Stanton.....	July 7
Pulaski.....	M. C. Spradlin.....	Somerset.....	July 10
Robertson.....			
Rockcastle.....	Lee Chestnut.....	Mt. Vernon.....	July 4
Rowan.....	A. W. Adkins.....	Morehead.....	July 14
Russell.....	J. R. Popplewell.....	Jamestown.....	July 14
Scott.....	A. Y. Covington.....	Georgetown.....	July 3
Shelby.....	A. D. Doak.....	Shelbyville.....	July 17
Simpson.....	L. R. Wilson.....	Franklin.....	July 8
Spencer.....			
Taylor.....	W. B. Atkinson.....	Campbellsville.....	July 10
Todd.....	B. E. Boone, Jr.....	Elkton.....	July 2
Trigg.....	N. C. Magraw.....	Cadiz.....	July 30
Trimble.....			
Union.....	Bruce Underwood.....	Morganfield.....	July 1
Warren-Edmonson.....	W. O. Carson.....	Bowling Green.....	July 9
Washington.....	J. H. Hopper.....	Willisburg.....	July 16
Wayne.....	Frank L. Duncan.....	Monticello.....	
Webster.....	C. M. Smith.....	Dixon.....	July 25
Whitley.....	C. A. Moss.....	Williamsburg.....	July 3
Wolfe.....			July 7
Woodford.....	Geo. H. Gregory.....	Versailles.....	July 3

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\*JOSLIN, C. L. and HELMS, S. T., Arch. Ped., 54:533 (Sept.) 1937



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# KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

VOL. 39, No. 7

BOWLING GREEN, KY.

JULY, 1941

## PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION

The American Medical Association advocates:

1. The establishment of an agency of federal government under which shall be coordinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American System of democracy.

## EDITORIALS

KENTUCKY HONORED THROUGH  
DR. RANKIN

The leadership of Kentucky medicine was again recognized by the American Medical Association when Dr. F. W. Rankin, of Lexington, was made president-elect at the recent Cleveland session. Dr. Rankin will succeed Dr. Frank Lahey, of Boston, at the 1942 session.

Dr. Rankin was born in North Carolina, was graduated from the School of Medicine of the University of Maryland in 1909 and was a surgeon on the staff of the Mayo Clinic for several years. He spent one year as Professor of Surgery at the University of Louisville, School of Medicine and was recently elected Clinical Professor of Surgery in our medical school.

During World War 1 he served as a Major in the Medical Corps and was the commanding officer of a base hospital in France. He is now a Colonel in the Reserve Corps. He is past president of the Southern Surgical Association and the Southeastern Surgical Congress. In the American Medical Association, he has for a number of years been a member of the Council on Medical Education and Hospitals and Chairman and Secretary of the Section on Abdominal Surgery and a member of the House of Delegates from this section. He is at present a member of the Committee on Medical Preparedness. Dr. Rankin has been a prolific writer of clinical and scientific surgical articles in medical publications and is co-author of two books.

Dr. Rankin as a surgeon is as well known as any other member of the medical profession in America.

## HOTEL RESERVATIONS

It is not too early to make your hotel reservations for the annual meeting of the Kentucky State Medical Association which will have its headquarters at the Brown Hotel, September 29-October 3rd. All the hotels have assured us that there will be ample space for all the members attending the meeting, but to insure a good room it is necessary to make your reservations early. On account of Fort Knox, Charlestown and other defense plants, Louisville is now quite a crowded city.

There will be many interesting features on the program and no physician can afford to miss this important meeting.

## A. M. A. IN CLEVELAND

We wish that every member of the Kentucky State Medical Association could have been present throughout the recent session of the American Medical Association. The attendance was much larger than usual even though the weather prevented the attendance of many who would have driven in from the immediate neighborhood.

The scientific and technical exhibits were so valuable that they are hard indeed to describe. Our good friend and roving reporter, Dr. Misch Casper, has consented to write a report of these exhibits, which I know will be of great interest and value.

The session devoted to scientific matter had a record attendance and the presentations were both timely and interesting. The Physicians from Kentucky who were present, were kept busy hearing things of interest and value to them.

The numerous important problems presented to the House of Delegates were handled by the Reference Committees with their usual careful scrutiny and expedition. The outstanding action was the unanimous request to the President and Congress that a commission on the procurement and assignment of medical officers for the Army, Navy, U. S. Public Health Service, for war industries and for the civilian population, be created. It was recognized as an impossibility for a civilian organization, without authority to enforce any rules, to accomplish this. It was generally recognized that we are now at war and that thousands of additional physicians will be demanded for patriotic services.

There were many other important actions which will affect the services of organized medicine to the public. The Minutes of the House of Delegates will be published in the A. M. A. Journal, in full, in the June 21, issue, and we wish every member of this Association who is not already a fellow of the American Medical Association, would write to the office in Chicago and secure the fellowship and subscribe to the Journal for this issue. It is so important that every physician in the United States know exactly what is being done by this democratic organization that it is inconceivable to us that anyone would be satisfied not to receive the weekly issues of the greatest medical journal that is published in the world.



MEMORIAL TO DOCTOR  
CLAUDE THOMAS WOLFE

Kentucky medicine has suffered a great loss in the untimely passing of Doctor Claude Thomas Wolfe. Always an ambitious and untiring worker, the very qualities which may have contributed to his early death.

Associated with Doctor Wolfe for several years, I had the opportunity of knowing the man beyond his usual broad contacts. His benevolence and charity began with his first professional service and always were a motivating influence. Many times I have known him to extend his efforts beyond normal limits to help some poor unfortunate to better health or vision, disregarding other professional or social duties.

As a teacher he constantly would strive to keep his students abreast of medical progress, however, the clinical insight and surgical judgment he possessed, left them a wise conclusion in the end.

He was a host beyond compare. His timely conversation and ready wit marked him a gracious and thoughtful gentleman. By the same measure he held a deep responsibility for his family.

The honors bestowed on him were many in appreciation of his long and signally successful service.

Although more than occupied by his medical work he miraculously found time for further contacts with his fellow man. His chief relaxation was a good round of golf, and it had to be good to offer him competition. A short vacation from his office and teaching duties was observed for many years among his associates of his beloved Juniper Hunting Club in Florida.

Many times he commented on the rather complex urban life thrust upon him, yet he never lost sight of his early rural life and a true appreciation of the simple and fundamental things of life, the quality that endeared him to all of us.

Dr. Claude Thomas Wolfe was born September 22, 1883 at Mooleyville, Ky., the son of Dr. Z. C. and Martha Wolfe. His early education was in the public schools of Corydon, Indiana, to which town his family moved a short time after his birth. He attended the University of Indiana for his advanced education and after two years there came to the Kentucky School of Medicine in Louisville to begin the study of his chosen profession. Following his first

year at this institution he was awarded the Freshman scholarship and consequently was given a part-time teaching appointment. Dr. Wolfe received the degree of Doctor of Medicine, with highest honors, in May 1907.

Following his graduation he practiced medicine in Corydon, Indiana, for two years. During this period, in 1908, he married Miss Nell Keller of Corydon.

In 1909 he began the study of Ophthalmology and Otolaryngology, at the Chicago Eye and Ear Infirmary and ended this service as house surgeon. He returned to Louisville the next year and opened an office for private practice and became associated with the University of Louisville Medical School as instructor of Ophthalmology and Otolaryngology. This service continued unbroken until the first World War. Dr. Wolfe enlisted in the Medical Corps in 1916 and at the end of hostilities was in charge of a base hospital in Georgia. Upon his return he was appointed assistant clinical professor of Ophthalmology in the University of Louisville Medical School. In 1926 he studied in Vienna.

The following year he was asked to occupy the chair of Professor of Ophthalmology in the University of Louisville, a position he held until his death.

Dr. Wolfe had many papers published by nationally recognized Medical Journals and a complete list is recorded in the Medical School Library.

He was an active member of the following societies:

Medico-Chirurgical Society of Louisville.  
Louisville Eye and Ear Society  
Kentucky State Medical Association  
American Medical Association  
American Academy of Ophthalmology and Oto-Laryngology

Fellow of the American College of Surgeons

He held hospital staff appointments, as follows:

Chief of Staff in Ophthalmology of Louisville City Hospital.

Chief of Staff in Kentucky School for the Blind.

Chief of Staff of Norton Memorial Infirmary

Consulting Surgeon Kosair Crippled Children's Hospital

Staff Member, St. Joseph's Infirmary  
Staff Member, Children's Free Hospital  
Staff Member, Kentucky Baptist Hospital  
Staff Member, Jewish Hospital

The achievements and standards set by Dr. Wolfe are a true challenge for those who follow him.

A. E. BELL, M. D.

### PRELIMINARY PROGRAM

The program for the Louisville meeting has been completed in tentative form. Certain changes in all probability will as usual be made at the last minute.

Our guest speakers will be: Arthur H. Curtis, M. D., Chicago; Frank H. Lahey, M. D., Boston, President of the American Medical Association; Fred W. Rankin, M. D., Lexington, President-Elect of the American Medical Association; Alphonse McMahon, M. D., St. Louis; A. P. Williams, D. D. S., Louisville and E. C. Hume, D. D. S., Louisville.

Round table discussions constitute a special feature of the program. These discussions include: Cardiac Emergencies, Emmett F. Horine, Louisville; Fractures, Barnett Owen, Louisville and Obstetrics, W. F. McConnell, Louisville. Other subjects for round table discussions will be added later.

Another special feature embraces papers on The Selective Draft by Colonel Holmes of Fort Knox, and a few Kentucky physicians whose names have not been selected. The Section on Eye, Ear, Nose and Throat will meet on Monday and Tuesday.

The preliminary program embraces the following subjects:

Modern Treatment of Contagious Diseases.

Sinusitis and Its Relation to General Systemic Diseases.

Blood Transfusions.

Surgery of the Spleen.

Review of Six Thousand Spinal Anesthetics from the Viewpoint of the Surgeon.

Appendicitis in Kentucky.

What Progress Have We Made In Cancer?

Evolution of the Walking Iron (with motion pictures).

Suppurative Disease of the Chest.

A Review and Conservative Management of Pelvic Infection.

Management of Middle Ear Infection.

The Prevalence of Neuroses in General Practice.

Obstetrics.

Traumatic Injuries of the Face and Their Treatment.

Consultations.

Non-Penetrating Wounds of the Heart.

Value of Gastric Analysis.

Peritoneoscopy.

Surgical Disease of the Spleen.

Group Examinations of Selectees.

Thornton Scott, Lexington, will deliver the Oration in Medicine, and Guy Aud, Louisville, will deliver the Oration in Surgery.

It is of special interest to note that we will have with us this year the Past-President of the American Medical Association in the person of Irvin Abell, Louisville; the President of the American Medical Association Frank H. Lahey, Boston, and Fred W. Rankin, Lexington, the President-Elect of the American Medical Association.

The subjects covered by the program are enumerated in order that those who may wish to enter into the discussions will have ample time for thought and study. Speakers will be requested to suggest the names of those they wish to open discussions on their respective papers. The program in final form will be published in full in the Annual Number.

### SCIENTIFIC EXHIBITS

Again at the coming annual meeting, Kentucky physicians will present a series of scientific exhibits which will contribute much to the post-graduate training of our state members. Each year has seen an increase in the number and excellence of the exhibits, and indications are that the coming exhibit will be the best of its kind at any of our state meetings.

W. O. Johnson, Louisville, who is Chairman of the Scientific Exhibit Committee, has arranged for ample space for every type of scientific exhibit. In order to facilitate the handling of the exhibits to the best advantage, the committee has decided to set September 10, 1941 as the deadline on exhibits, so send the committee your application as soon as possible.

The Scientific Exhibit at the recent Cleveland meeting of the American Medical Association was one of its most interesting features, according to physicians who attended it. This year the state society is fortunate to have as guest of our organization, Dr. Thomas G. Hull, Chairman of Scientific Exhibits of the American Medical Association and he will have on exhibit some excellent demonstrations of national importance.



## ORIGINAL ARTICLES

## MILITARY MEDICINE

SOME PROBLEMS OF THE ARMY  
SURGERY

C. D. HOLMES, M. D.

LIEUT. COLONEL, MEDICAL CORPS, SURGEON  
Fort Knox

In discussing the problems of the Medical Department of the Army, it may be well to look at some of the difficulties under which the Medical men of our Army have worked in the past. Medicine and surgery in the colonies, in the time of the American Revolution, reflected the state of those times in Europe, more particularly in Great Britain. No marked advancements were being made or had been made recently. The great discovery of the circulation of the blood, in the beginning of the century, had not led to important results. Surgery had advanced little beyond the time of Ambrose Pare, medicine was still in the hands of the givers of strong drugs, and the chief and only capital operations were amputation and trephining. The great cavities of the body were beyond reach. Anesthesia was not to come for 70 years. Even so simple a thing as the hemostatic forcep was yet far in the future. Suppuration was expected in all cases, and, it was a matter of course, that worse infections were incurred in the hospitals than in private practice. Cathartics, emetics, blisters, blood-letting, opium and the bark were the standbys. Even in surgical cases there was more reliance on internal medication than on surgery itself.

In the period of the American Revolution there were few hospitals. One hospital had been founded in Philadelphia as early as 1755, partly due to the efforts of Benjamin Franklin. The second permanent hospital in America was that of New York, erected in 1771, destroyed by fire in 1774, and was partly rebuilt when the war began. It was used more as a barracks than a hospital. As the hospitals of this time, on the continent as well as in this country, were literally packed with patients, it is not surprising indeed that in the Hotel Dieu Paris, the beds were placed in triple rows, with four to six patients in each bed. Often in the morning the dead were found with the living, and of five entering the

hospital, as a rule, but four were left alive, giving that hospital the astounding mortality of 20%. This was typical of the hospitals of that time. Of the patients in St. Thomas and St. Bartholomew of London, one in every 13 died annually, while in Manchester with their less crowded infirmaries, but one in twenty-two died, and in private practice still less. These were Civil hospitals. Military hospitals were worse, for they were as a rule in unsuitable buildings, where the sick and wounded were crowded together indiscriminately, without proper food, clothing, nursing or sufficient medical attention. Worst of all, each patient was subject to and could not escape the infections of all others. As Tilton said, "Many a fine fellow have I brought into the hospital with slight infection, only to be carried out dead of the hospital fever." In fact a greater number of the wounded died of infection contracted in the hospital, than those that died of the effects of their wounds.

The state of military surgery at this time, in America, may be learned from a little volume written by Dr. John Jones, Professor of Surgery in Kings College, New York. This book was designed chiefly for the use of young military and naval surgeons. Of the treatment of wounds he recommends dry, soft lint to them, which is the best application in the whole course of the cure. At first it retains the hemorrhage with less injury than other medicine, then afterwards by absorbing the matter which is first acrimonious it becomes in effect the best digestant. During the incision and granulation, it is thought that it can be applied to the wound to stop hemorrhage and at the same time is an easy compress on the sprouting fungus. I will not recommend to you any ointment for wounds unless some mild, soft one to arm the pressure controlled to cover the limb. When a wound degenerates to such a bad state as to resist this simple method of treatment, and loses that healthy florid appearance which characterizes a recent wound, it is then denominated an ulcer, which is distinguished by various names. Inflammation caused by irritation and pain are to be combated by sudorific anodines, bleeding, gentle laxatives, warm baths and soft cataplasms to the affected parts. Opium is always necessary. Abscesses are to be opened, and the first appearance of gangrene obviated by a more nourishing diet, spirituous fomentations and a liberal use of the bark. Incised wounds are to be

brought together with sticking plaster and bandage. The use of a suture is not necessary in longitudinal wounds. Transverse wounds require the suture. Interrupted suture is used and the needle dipped in oil, if plaster is applied over the suture. Punctured wounds require no special treatment unless deep and winding, when they must be enlarged. Great dependence was placed on bleeding for he said the patient will be bled all he will bear bleeding to be repeated at intervals.

In general, all serious compound fractures, especially those involving the joints, call for amputation. Compound fractures require dressing at least once a day, and in hot weather, with large discharges, oftener. It is significant that the wounds of those days were chiefly made by musket-balls, though a considerable number of wounds were made by knives, clubs, hatchets, and bayonets. As there was no regular system of collecting the wounded, those seriously wounded often lay unattended for days, and when cared for, the means in the hands of the surgeon were so limited, the surroundings so unfavorable, one is led to wonder what he would have done in the case of grave wounds.

The three principal diseases which affected the Army of those days were: dysentery, camp fever or putrid fever and smallpox. The wide spread and malignant dysenteries which attended the Armies of those days and for a hundred years later are difficult to understand. Of all the diseases of that day, putrid fever, which is synonymous with jail fever, camp fever, and hospital fever, and included typhoid fever as well as typhus, was the one most to be feared. Smallpox was the one infectious disease which the medical men of that period did understand and could combat with a measure of success. Their weapon, a heroic one, inoculation, was successful in reducing the death rate from about 16 2/3 per cent down to 1/3 of 1%. This method while it was heroic, was adopted from a procedure originally used by the Turks but borrowed from the Hindus and introduced into Europe about the beginning of the 18th century. This method was authorized by Congress, and Washington, himself, is said to have been inoculated.

In that period of the history of the Medical Department, shortly following the early revolutionary time one of the long to be remembered names is that of Dr. William Beaumont, from whom the Army General Hospital at El Paso, Texas, is named. This officer came from New England

and entered the Medical Service of the Army in June 1812 as a surgeon's mate. After serving through the War of 1812, he was sent to Fort Mackinac, Michigan, where he spent five years in a post hundreds of miles from any other medical men. Among the many injuries treated at this wilderness station, was the celebrated gastric fistula of Alexis St. Martin, which followed a gunshot wound of the abdomen. The work done and the observations made by Beaumont in his studies of gastric juice and its digestive action were epochal and pioneering in character. Of him Osler said, "The pioneer physiologist of the United States, and the first to make a contribution of enduring value, his work remains a model of patient persevering research."

To illustrate that they were trying knotty problems in the Mexican War is of interest. The first general hospital established was for General Scott's expedition in Vera Cruz. To organize the hospital was no small undertaking for there was not a single steward except invalids and incompetent ones and an invalid wardmaster. No well men were left for cooks and nurses when the soldiers marched away, there was not a single kitchen table, bench, bunk, privy or chamber utensil. In a word there was nothing but the miserable sick and under these circumstances the machine had to be put in motion. At Vera Cruz yellow fever appeared in addition to malaria, dysentery etc., and out of 412 cases 112 died. Surgery was bad and the results poor.

The story of the Medical Department during the Spanish American War is chiefly the story of the management or rather mismanagement of typhoid fever, as that was encountered in all the camps where the soldiers of this period were gathered together.

It is a significant fact in the history of the problems of the Medical Department that the first attempt at having establishments known as Field Hospitals was made at the Battle of Antietam. To be sure they were improvised from houses and barns near the battlefield, but as such they did serve, together with the ground surround them and under the trees on the lawns, for the treatment of such emergencies as had to be taken care of at the time. A little further along in the Civil War period at the Battle of Fredricksburg, Virginia, Dr. Johnnothan Letterman found a solution to getting the patients off the battlefield. As the troops marched forward, wagons were set aside, laid out and definitely designated to bring back the wounded from



the field of battle. This step marked the beginning of ambulance carriage of patients from the field of battle to hospitals in the rear. And this marks the beginning, in the American Army, of regular ambulance service.

I should like to mention the names of four outstanding medical men of our time, who are long to be remembered for the work they have done and the contribution they have made to the health of the Army. One of these is Major Walter Reed, who was responsible for the establishment of the direct method of transmission of yellow fever, and its eradication in the Army Camps. Col. F. F. Russell, formerly of the Army and later of the Rockefeller Institute, in 1909 introduced typhoid immunization into the Army and in this country generally which resulted in the practical elimination of typhoid fever. Col. William L. Keller, a finished surgeon in spite of the Army scheme of development of Army Medical Personnel, has carried the Surgeon's work to a higher plane than perhaps any other man in the Army at the present time. Col. Keller's reputation as a Surgeon is widespread throughout the country. He has the confidence of Surgeons generally everywhere and as a reward for the service he rendered the Army, when time came for his retirement, he was allowed to leave the service only with a mortgage that he be retained on the active list but relieved from active duty and to come back to Walter Reed or to any other place in the Army as might be needed as a surgical consultant. One other outstanding character, in the history of the Medical Department, should be mentioned, that of the late Surgeon General William Crawford Gorgas. General Gorgas is the one man without whom the construction of the Panama Canal perhaps could not have been completed. This, not because he had all the information necessary to maintain a proper degree of sanitation in the Panama Canal Zone, but he did have a large supply of such information, and he had the ability to gather about him other men with whom he could work and who helped to do the things that were required to do to make the Canal Zone habitable for white men. In addition to this he also had the ear of the President, the respect and the admiration of Congress, and he was able thereby to get things done that a great many other men could not have accomplished. Of all the men we have had in the Office of Surgeon General, U. S. Army, no one is perhaps as widely known throughout the

world for his epochal work in cleaning up and making a veritable tropical paradise out of the Panama Canal Zone, as Dr. William Crawford Gorgas.

The Medical Department is not apt to be the object of great popular enthusiasm in time of War. At its best, it is taking care of those who are out of luck, or are engaged in humble tasks, looking merely to keeping men fit for the work, which will bring glory to others than the Medical Department. The achievements of a Beaumont, a Reed or a Gorgas attract the attention of the world, but of course, these men and such achievements are rare. Most Medical Department Officers lead rather obscure lives, as do most of their conferrers in civil life, yet we like to believe, and I do believe after nearly 25 years of Army life, that they are doing worth while work, are useful in the service and to the state, and that our usefulness is growing now as it has grown in the past. Our lives contain as few regrets perhaps, and as much satisfaction as those of any group of men to be found anywhere. Our story while by no means entirely a matter for pride is the story of honest effort, of continual striving, of unselfish service, of steady improvement and of very honorable and very great achievement.

The Medical Department, the Army, and our Country are all to be congratulated upon the fact that our reserve of officers is growing, that the Medical, Dental, Veterinary, Nursing and different professions of the country are all ready to do their part again as they did in the World War, to become again a part of the Medical Department to help it perform its tasks, to make possible the performance of those duties to which it may be properly assigned.

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**Increasing industrialization** has been accompanied by a decline in mortality from tuberculosis, probably because of the general improvement in standards of living for the bulk of the people brought about by industrialization. Density of population itself does not determine the mortality from tuberculosis but there is some causal factor probably connected with crowding and social environment. For the time being at least the level of mortality from tuberculosis may be considered an index of hygienic and social culture. By this standard the United States ranks first among the world states even when the high mortality of the Negroes is included. Geo. Wolff, M. D., *Amer. Rev. of Tuber.*, July, 1940.

## PREVENTION AND TREATMENT OF ACUTE RESPIRATORY DISEASES AT FORT KNOX, WINTER 1940-41

ALVIN J. BAYLEY, M. D.

LIEUT. COLONEL, CHIEF OF MEDICAL SERVICE

Fort Knox

1. Respiratory disease from the viewpoint of prevention includes the common respiratory diseases such as coryza, tonsillitis, bronchitis, etc., the pneumonias, influenza, measles, mumps, and in fact any disease which is usually spread by the secretions from the respiratory tract and spread by direct and indirect contact.

2. Prevention of respiratory disease is accomplished mainly by retarding the progress of an epidemic. This is accomplished by control of case and carrier, of transmission agencies, and the protection of susceptibles.

3. In the last 5 months at Fort Knox we have had an epidemic of influenza, an undue prevalence of pneumonia, measles, scarlet fever, and mumps. Our problem has been to retard the spread of these diseases.

4. The methods used in order of importance were as follows:

- a. Daily inspection of the Command. In some cases, twice daily.
- b. Early hospitalization and segregation.
- c. Sterilization of dishes.
- d. Bed spacing, cubicling, and ventilation with avoidance of crowding.
- e. Avoidance of undue fatigue.
- f. Proper food and clothing.

The military situation modifies our preventive measures. In time of peace, all of the steps I have mentioned to be used in retarding the progress of respiratory diseases can be utilized. In time of emergency with a large, quickly formed Army, the case is different. Crowding, poor housing, tents in winter, insufficient seasoning of the man, etc. occur. All of these defects hamper our efforts and the result is that there is very little retardation of the spread of respiratory disease. Military hospitals then become over crowded, cross infection occurs in wards, the staff is overworked, and proper treatment difficult.

6. Taking up the respiratory diseases one by one. First measles: 600 cases, German 200 cases; with one death from measles encephalitis. Second: Scarlet Fever 325

cases with no deaths. Third: mumps 500 cases with one death due to pneumonia. Fourth: influenza 3500 cases, no deaths. Fifth: pneumonia 250 cases with one death. This is the death noted under mumps. Sixth: Common Respiratory disease 3700 cases.

7. Taking up pneumonia: 250 cases with one death. I will try to first describe the types of our cases, the severity, the etiology and the treatment. Our pneumonia series of 250 cases can be divided into mild, moderate, and moderately severe groups. One half of the total number or 125 cases were mild. One quarter of the cases were moderate in severity, one quarter of the cases were moderately severe.

Pneumonia as it occurred at Fort Knox from December, 1940 to May, 1941 presented three different clinical pictures at three different periods. In December and early January the cases were severe, lobar in type, one lobe involved, pain in chest, rusty sputum, labored respiration, text book physical findings. X-rays showed large lobar dense infiltration. The second group in late January, February, and early March were milder in character. The onset was similar to that of the "common cold," but whether of mild degree or not and also whether back to duty or convalescing (apparently) on the ward, symptoms of pneumonia would appear: Chill, fever, rusty sputum, cough, occasionally pain in chest. Physical signs were areas of distant breath sounds, coarse rales. Laboratory reported WBC 10,000 to 15,000. Sputum showed few organisms. No type. X-Ray showed single and numerous small areas of infiltration, light in density. Many cases of pleural effusion developed. A few empyemas. The cases appeared mild. The third group of cases were moderately severe and of a still different character. Sudden onset. Physical findings of moderate degree of consolidation. X-Ray findings of a large area of infiltration but not as dense as in the first group. High white counts, numerous bacteria, but unable to type. Complications few.

The etiology of the Pneumonias was investigated as far as our facilities would allow us. The first group was true primary lobar pneumonias with typable pneumococci. The second group followed the flu epidemic and appeared to be a virus type pneumonia. In this connection the Rockefeller Foundation on December 29 found that only 16% of our flu cases showed the type A virus and that the washings from throats made ferrets ill with a disease



which was proved to be neither influenza A or B virus or due to bacterial infection, but the infectious agent could not be maintained in serial passage to the point where neutralization test could be done. We feel that the etiology of the second group was possibly a virus, that the pathology was a diffuse inflammation of the entire respiratory tract starting at the anterior nares and involving progressively and quickly the finer bronchioles, that probably there was some plugging of the finer bronchioles with small areas of atelectasis and surrounding infiltration. The bacterial infection was not present or was controlled by the sulphonamides when present. The third group of cases seems to be a virus type with more invading bacteria.

The treatment of our pneumonia cases was in accordance with the directions from the SGO based on the recommendations of the National Research Council. Our cases

were hospitalized early, sputum and blood cultures taken, treatment then started ordinarily within one hour of admittance and was based on the clinical picture. If pneumonia was found not to be present within 24 hours, treatment was discontinued. With this therapy program, we feel that our cases received treatment very early indeed, in fact in most cases within a few hours of the onset of symptoms of pneumonia. We believe that our low mortality is due to this.

There is considerable room for speculation as to just what we were treating in our 125 mild cases and just what the treatment effected. Was it a virus pneumonia, or a bacterial pneumonia? Did our treatment act as a prophylactic and prevent the development of secondary invading bacteria, or did it stop the growth of bacteria already present and actively producing inflammatory response? We know that few

	FIRST PHASE 25% cases Nov. 1940-Jan. 15, '41	SECOND PHASE 50% Cases Jan. 15-March 25, '41	THIRD PHASE 25% Cases March 25, to Date
Onset	Sudden, no prodroma	Slow onset, ill one or more days. History upper respiratory infection prior. Developed while on wards in hospital	Sudden onset
Severity	Severe	Mild	Moderately severe
Symptoms	Chill, fever, chest pain, malaise, cough, rusty sputum, dyspnoea	General aching, slight chills, profuse sweating, non-productive cough	Similar to first phase, sputum more bloody character
Physical Signs	Impaired resonance. Breath sounds diminished. Fine, crepitant rales	Resonance normal. Breath sounds distant. Rales loud, moderately coarse to coarse	Same as first, except coarser rales
X-Ray	Lobar involvement, dense areas. Right middle lobe predominant	Lobular or bronchopneumonic. Patchy areas, scattered, no localization. About 20% tendency lesions to show central rarefaction	Lobar in distribution, not as dense as in first
Sputum	Pneumococci, typable	No organisms	Few pneumococci, not typable, staph, strep.
Blood count	Average 15,000	10,000 to 15,000	18,000 to 50,000
Complications	Rare-1 empyema	30% Pleural effusions Empyema more common	Few, usually empyema
Resolution	Prompt	Variable tendency to slow clearing, recurrence new areas. Convalescence prolonged	Moderately slow

cases, in which chemotherapy was ordered, received no treatment; that the signs and symptoms persisted and that the charts were inspected to see as to whether chemotherapy although ordered might not have been given. On the other hand, a few mild cases received no treatment for a day or so and progressed so that chemotherapy was not necessary.

8. Influenza was epidemic from early December to late April. The peak of the epidemic was December 13th. Complications were few. Cases numbered 3500. The peak of the epidemic occurred in 4 days, which is typical of influenza.

9. Common respiratory disease occurred during the same period, the peak of the incidence of these diseases being March 13th. Cases numbered 3600. Complications few. The peak of the undue prevalence of these diseases following an influenza epidemic was a little late in arriving.

10. German measles, 228 cases, all mild. January to May, no complications.

11. Measles, 585 cases, same period, 25% mild, moderate 65%, severe 10%. Complications 5% Otitis Media; 3% of cases treated with Sulphapyridine because of suspected pneumonia. One death from Encephalitis.

12. Scarlet Fever, January to May, 385 cases. 26% mild, not given anti-toxin; 51% moderate, of which group 15% received anti-toxin; 23% severe cases, 74% of which received anti-toxin.

The complications were 6% pulmonary, 8% Otitis Media, 4% peritonsillar abscess, 11% cervical adenitis, 10% other complications.

Sulphanilamide and sulphothiazole were used in the prophylaxis of complications and the treatment of same.

13. Mumps, same period 525 cases. Mild 40%, moderate 50%, severe 10%. Orchitis occurred as a complication in 20%.

14. Summarizing respiratory disease. From our experience at Fort Knox I would say that we have been able to retard the rate of spread of these diseases, somewhat, thereby decreasing the number of cases and possibly lessening the severity of the cases, and that we have been able by means of early chemotherapy to lessen the number and severity of complications and to have reduced the pneumonia death rate to considerably under 1%.

At practically any age and especially in young adult life, respiratory tuberculosis seems a disease of more serious prognostic import among females than among males. *Lancet* editorial, Feb. 22, 1941.

## SOME MEDICAL PHASES OF SELECTIVE SERVICE

WILLIAM N. LIPSCOMB, M. D.

MAJOR, MEDICAL CORPS, STATE MEDICAL OFFICER

Louisville

### Kentucky State Headquarters For Selective Service

Selective Service is not new. All recorded history exhibits the obligation to contribute military service. Volunteer methods were failures in the Wars of 1776, 1812, 1845 and in the Civil War until President Lincoln had a draft law passed. This law was only partially effective. Seventy-five years ago, an assistant provost-marshal of Illinois formulated the basis of the World War Number One Draft Law, and our present one.

Selective service represents more than an euphonious title. It is practical idealism at work; one of the answers of organized society to organize crime, the latter international in scope. The basic mission is procurement of manpower. There are over 6,000 local boards in the United States which function under common regulations. Their authority and power transcend all other concepts and plans in American Government to date. These boards hold and direct the destinies of over sixteen million young men. Family traditions must be preserved; workers sent to essential industries; finally, men ordered to armed forces. These board members must not be swayed by community pride, prejudice, or politics. They must prevent injustice to the registrant or to the Government. If, in our history, a group of men considered nationally, should prove honesty, courage and independence of thought, and sureness of judgment, that time is now.

We plan mechanization of the Army; two Navies; manifold submarines; skies darkened with planes; the thousand-fold small items necessary. In the physical selection of men, the Nation relies on civilian, Army and Navy physicians. Eliminate the examining factor and the whole falls for non-support. Thus the physician has an important position, a remarkable recognition, a definite responsibility. That he has carried, and will carry, this physical "Message to Garcia" goes without saying. On the local boards, including his medical advisory board colleague, he is the capstone of the

Read before the Jefferson County Medical Society, May 19, 1941, and the Sixth and Seventh Councilor District, May 22, Danville.



physical phase of Selective Service. On his ability, his honesty, and his courage, rests today the trust of a nation. This duty will be met. Our land and naval forces must be so effective that no outlaw nation will insult with impunity or defeat with ease. The international situation is desperate. For the first time in our history, we face isolation, even possible defeat. Line officers depend upon all of us to see that no unreasonable number of physical and mental breakdowns will occur after men are in uniform. Kentucky physicians are rejecting 29%, about 3% lower than the national average. However, the Induction Station, after examining 6793 selectees, rejected 16.8% sent by you and your boards. Registrants passed by you in error will be rejected by Induction Station Medical Officers, who are answerable to higher military authority for any errors made in accepting physically or mentally unfit men. This means they do not intend to accept them and will not do so. However, they will welcome you when processing selectees.

Suppose you project your examinee beyond the local board and the Induction Station. Consider the line officer whose duty will be to train him, perhaps to handle him in combat. Line officers will judge all examining physicians, civilian and military, by the same criteria they judge their various commands. Will this registrant standing before you make good as a soldier, physically, mentally, and emotionally? Is he the "Cream of the Crop"? The proper "yard-stick" by which to measure a soldier is that of combat status. Will this registrant be approved by his Battery Captain when the guns roll up? Will he "carry on" when the "going gets tough" for the infantry? Will he "stick it out" when enemy planes assault from above? Can the aviation officer rely on his work before a pursuit plane "takes off"? When tanks are ordered to "break through," will your examinee stand the strain? Thus are your responsibilities to line officers if an effective army is to be built. An elderly railroad car foreman once remarked: "In the early days, we had wooden cars and steel men. Now we have steel cars." Physicians must so select that line officers will secure what they need. Basically, the Army is in terms of manpower, even if this is a machine age.

About one-third of the 330,000 Kentucky registrants have been classified. Suppose we look at a given hundred. In this group 66.9 have dependents; .9 are occupationally deferred; .6 are students; 10.3 are permanently disqualified; 4.4 are 1-B, some possible

to be 1-A later. This leaves 16.9 possible 1-A men, of whom the Induction Station will reject 2.8. Therefore, of this one hundred, 14.1 will enter the Army.

Of 100 tentative Class 1 registrants, 8 are rejected by the local board for felonies and gross physical defects recognizable by laymen. This turns 92 to you as examiners. You will reject 29 and the Induction Station rules out 11. Thus 52 will be inducted.

Now let us analyze percentage rejections by local boards and examining physicians. This is from a study of 17,189 Forms 200. Sixty-three per cent will be placed by you and your board in Class 1-A. Of the remaining, the board will reject 3.1% for felonies. Your board and you will reject 21.3% for dental defects; 13.5% for G. U. reasons, which include lues and gonorrhea; 12.8% on orthopedic diagnoses; 9.5% catalogued as "mental and nervous"; 9.4% listed under eyes, mainly myopics. Your cardiac rejections run to 9% and hernia 5.1%; weight and height, the latter seldom, rule out 5.6%; pulmonary 3.9%; nose, throat and ears, chiefly otitis media, 3.5%; abdominal reason, 1.7%; endocrine 1.3%; skin, 3%.

Of every 100 registrants passed by you, 16.8% are rejected by the three induction stations. Break down these 1142 rejections to May 1, 1941 in percentages, and let me hope you will not be surprised. Felonies and minors overlooked by local boards account for 2.7; nervous and mental pathology 35.2; genito-urinary, again including venereal diseases, 15.2; teeth, 11; eyes, 6.5; bones and joints, 5.5; nose and ears (chiefly otitis media) 5.2; cardiac 5.1; hernia, 4.8; lungs, 4.2; weight and height, (chiefly underweight), 2.4; abdominal, .8; endocrine, .7 (mainly Froelich's Syndrome); skin, .6; blood, .1. While dental rejections lead with examining physicians, they drop to third place at the Induction Stations. Your mental and nervous rejections are fourth in the percentage column at home and first at the Induction Station.

SELECTIVE SERVICE REJECTIONS AT ALL  
STATIONS TO MAY 1, 1941

<b>MENTAL AND NERVOUS</b>			
Psychoneurosis	233		
Dementia Praecox	68		
Imbecility	24		
Epilepsy	12		
Chronic Alcoholism	33		
Infantile Paralysis	5		
Post-encephalitic or post-traumatic syndrome	16	391	35.2
<b>GENITO-URINARY</b>			
Gonorrhea	142		
Syphilis	9		
Inguinal Testicle	10		
Bladder and Kidney	4		
Varicocele	8		
Hydrocele	0	173	15.2

TEETH			
Insufficient	90		
Malocclusion	36	126	11.0
EYES	75	75	6.5
BONES & JOINTS			
Fractures	44		
Flat Feet	4		
Arthritis	7		
Amputation	0		
Spine	6		
Osteomyelitis	2	63	5.5
NOSE & EARS			
Otitis Media	48		
Sinusitis	12	60	5.2
HEART			
Hypertension	16		
Rheumatic Heart	21		
Vascular Heart	15		
Tachy-cardia	5	57	5.1
HERNIA	55	55	4.8
LUNGS			
Pul. Tuberculosis	29		
Asthma & Bronchitis	20	49	4.2
NOT PHYSICAL			
Felonies and Undesirables			
Discharge	23		
Underage	8	31	2.7
WEIGHT & HEIGHT	37	37	2.4
ABDOMINAL			
Fistula	3		
Hemorrhoids	3		
Stomach Ulcers	3		
Appendicitis	0	9	.8
ENDOCRINE & METABOLIC			
Thyroid	3		
Diabetes	5	8	.7
SKIN	7	7	.6
BLOOD			
Anemia	1	1	.1
		1142	100.0

Looking over some of the total rejections, including Louisville boards, certain defects or diseases cause wonder as to why they were overlooked by examining physicians. Some of these are: Phlebitis, perforated ear drums, organic heart disease, chronic otitis media, hallux valgus, third degree; old fracture, seventh and eighth thoracic vertebrae, epilepsy, mental deficiency, hemorrhoids, insufficient dentition. Underage volunteers and felony cases rejected at the Induction Station are not physical rejections and not the fault of the examining physician. The examining physician has every right to assume that a registrant sent to him for examination has been properly classified and details arranged.

If more registrants were sent to medical advisory boards, the old adage that "Two heads are better than one," the common rule of your practice, would help greatly. This is especially true of neuro-psychiatric suspects, heart, pulmonary and orthopedic problems, and ear conditions. The dental

phases will be helped by addition of dental examiners and changes in regulations. Many selectees appear at the local induction station with plates. There is a friendly feeling, an attitude of partnership, in discussing these percentages and experiences rather than any hypercritical viewpoint. Please keep this in mind throughout the whole.

Reviewing rejections at induction stations, it is possible you will agree that these can be reduced by more rigid examinations at home, closer application of regulations, and improved methods of local boards. By the latter is meant, that felony records of selectees also raise rejection rates. There is also the "final fling" of registrants, activating old gonorrheal infections or creating new cases which also increases rejection rates. Inquiry should be made just before induction by examining physicians or board chairmen, since so many clerks are women. Non-scientific or laymen's terms should be used, especially with negro registrants where venereal rates are excessive. There is no reason why many ex-service board members cannot apply the same rules of their "Buck private" experience to present day selectees.

Psychiatric problems present a "stumbling block" when rejections by local examiners are compared with those at Induction Stations. The five leading diagnoses are psychoneuroses, psychopathic personality, mental deficiency, chronic alcoholism and simple dementia praecox. In the armed forces, these cases intrude upon discipline, morale and training. The soldier cannot depend on any self-designed protective mechanism in military life. Go back to July, 1918, when General Pershing cabled as follows: "Prevalence of mental disorders in replacement troops recently received suggests urgent importance of intensive efforts in eliminating mentally unfit from organizations . . . . . prior to departure from the United States." The April, 1941, issue of "The Military Surgeon" editorialized partly as follows: "Recent as has been the inauguration of the draft examinations, the flow of nervous and mental derelicts from this source has struck the service hospitals and through them the Veterans' Facilities." The cost of these breakdowns in service average about \$33,000 each.

The psychiatric rejection rate has been criticized both by local board chairmen and examining physicians. Dr. Witt of Franklin comments as follows: "To the average practitioner engaged in Selective Service work, neuro-psychiatry is a 'pain



in the neck.' It is a bit too elusive, too ethereal for him. Take the case of a physically sound country boy whom he has known and doctored all that boy's life—good teeth, good heart, good lungs, who stands well in his community and meets his obligations, showing early signs of good citizenship. Ship him one hundred miles to an examining point where, before a strange doctor, he fails to smile properly in response to some question, or his replies to set queries do not fall in selected patterns. To brand him as a psychoneurotic is a 'helluva come-off.' " Thus an examining physician's view. Now to quote an Induction Station psychiatrist, Dr. Guiglia: "At the induction station, the situation is just the reverse. The inductee has left the security of his home, perhaps for the first time in his life, has lost his job, has left behind bereaved relatives, sick parents, or whatnot; is thrown in with a crowd of boys from all parts of the country and all stations in life; has to travel sometimes hundreds of miles to come to Louisville; his general feeling is that he is going to war, not just training. At the station, the boys are stripped, lined up, measured, weighed, tested generally and intimately, publicly, and after an hour or two of this tension and suspense, are questioned in detail regarding their inner life, hopes, ambitions, habits, fears, social standing, education, work, religion, prison record, etc. If there are any weak points, they certainly will come out, and they do come out, at this psychological moment. From our experiences so far, we can honestly say 70% of our rejections were clear-cut, outstanding, and unequivocally psychopathic cases, some actually suffering from acute psychoses; the remaining 30% of the cases were mostly borderline cases of such quality as to make their rejection or acceptance a matter of conjecture and subjective opinion; all were rejected who possessed only negative traits on top of their tainted ones. At times, we pass favorably cases of the borderline type, if they showed definite compensatory traits, such as insight, or marked mechanical ability, or unusual intelligence and good will."

Regarding this rejection rate, I have no quarrel with examining physicians who frankly admit lack of training in this specialty. This does not dim my pride in their general ability and pride in diagnosis. I realize the registrants are in their home communities, still living and thinking as civilians in an atmosphere of friends and long orientation. They are examined by a

physician, quite often a personal friend. It is also possible that the physical side of the examination is accentuated instead of the psychiatric phase.

Is not the answer to all this to send your suspects to the psychiatrists on the medical advisory boards? Another answer is that grade attained in school can be a partial index. In the psychiatric phase of Selective Service, I am equally sympathetic with the problems at home and the requirements of the Army. Quoting from Alexander Pope, "Act well your part, there all the honor lies." Moreover, Dr. Witt again writes: "And so it goes. I believe, Major, that your doctors in the field are going to do much better work as time rolls on. It was all mighty new to us at first. We are going to catch most of the hearts, bad ears, defective eyes, etc. Then some bright day, we are going to spot a fellow with psychoneurosis and the millenium will be here."

Following are some concrete suggestions based on the experience of a medical reserve officer on duty at an Induction Station in Kentucky:

There is not enough cooperation between local boards and medical advisory boards, especially as to reference of psychiatric problems.

Opinions of Medical Advisory Boards in doubtful cases should always appear on or be stapled to Form 200 for Army Induction Stations. A local board of Medical Advisory Board physicians should take into consideration the report of the private physician of a patient and due weight and consideration of those reports should be given when competency and ethical standards deserve such consideration.

Defer operative cases such as abdominal and herniotomies for six months.

Missing finger is any loss at or proximal to the middle interphalangeal joint.

Malocclusion is hardly a question for rejection any more, unless grossly severe. Furthermore, if the selectee be of sound constitution, pursues gainful occupation, we are to infer that the malocclusion present is not a source of difficulty and is not likely to be in the future. Therefore, this selectee will be accepted.

Varicoceles are practically all accepted now.

If malingering is definitely proven, classify him as 1-A, but if it is doubtful, suggest possibility of FBI prosecution.

Here is an item from National Headquarters to keep in mind: "Unless a man is permanently disqualified because of physical

or mental disability (Par. 362 (b), S. S. R.) complete physical examination should be made, but if examining physician finds registrant obviously permanently disabled, he may be classified in Class IV-F without further examination."

There is quite a difference of opinion on hernia. No doubt this ruling from the Corps Area Surgeon's office will standardize the problem: "Care should be taken by medical examiners to make a diagnosis of hernia only in those cases where there is a definite protrusion of an abdominal viscus into a hernial sac, or a definite history of such a hernial protrusion in the past. Relaxed inguinal rings, with or without impulse on coughing, will not be cause for disqualification unless actual hernia exists."

At State Headquarters, all copies of Form 200 are carefully checked. Care should be exercised that more be classified, if possible, as 1-B, especially G. C. and lues (except tertiary); and second, it should be seen to that repeated attempts are made that reclassification of these men be done in order to put them in 1-A. Many classifications of 4 should be 1-A or 1-B. Local Board physicians can easily make notes that 1-B selectees be checked at the end of a designated period for reclassification. In terms of interest, one group of 2,970 forms were surveyed at State Headquarters. It was found that examining physicians qualified 71.6% as Class 1-A, 8.1% as Class 1-B and 20.3% as Class IV. Both Medical Advisory Boards and examining physicians should exercise care in distinguishing between 1-B, which I construe as just short of 1-A, especially with regard to remedial defects, and IV which is more broadly permanently disqualifying defects. This has not been made clear in Selective Service Regulations, but would facilitate later re-classification by local boards.

May attention be called to a time-saving factor, especially applicable to cities and larger towns. Group examinations have been done successfully, especially at the Booth Memorial Hospital, Covington. Group examining is the rule at all Induction Stations. At Lexington in April, 95 students were processed at the University Health Service Headquarters for Board No. 42. Sufficient lay help was provided for clerical and laboratory work and serological specimens. Eight physicians and one dentist "teamed up" on this. Four hours and ten minutes were required, though several physicians completed their given assignments in less time. Registrants

can be examined within 90 days of induction; hence, it is recommended that group examining be more generally done. It is more rapid; it offers benefit of consultations. One physician should act purely as a reviewing officer to check omissions, recommend medical advisory board references, and advise physical classification. Experience will prove the obvious, namely—that ten physicians can examine 100 registrants in one group in far less time than any given physician can examine ten individually.

The Medical Advisory Boards have done and are doing a superb accomplishment. The detail, clarity of opinion, and definite classification have been an official delight to me in surveying forms.

One of the outstanding "high lights" of the medical side of Selective Service in Kentucky is the X-ray investigation of registrants of the nineteen Jefferson County boards, which include Louisville. The Army, examining physicians, and registrants are all fortunate in this particular. Special mention must be accorded Drs. A. T. McCormack, E. L. Henderson, Oscar O. Miller, Hugh Leavell and John D. Trawick. It was their idea, not mine; it was to their credit and that of the state Director that this idea has become a routine. It is my regret that this cannot be a state-wide program. An estimate of cost of Government care of a tubercular case which breaks down in service is \$7,000. The concentration of specimens for Kahn tests at the Waverly Hills Tuberculosis Clinic concurrently with X-Rays saves much time for examining physicians. The entire plan is most excellent.

"When the wick of reminiscence burns brightly in the oil of memory," I shall regard my active duty assignment with Kentucky physicians as a happy one. I must express real appreciation of your work, your patriotism, and our pleasant relationships. A Kentuckian by adoption, I have long since come to admire the Kentucky physician. County society and state association memberships are highly valued by me; in fact, regarded as indispensable.

In conclusion, may this be your concept and obligation: Out of the cross-section of young American manhood must come men "fit for the rigors of service." Colonel Madigan of the Surgeon General's office, sums up the medico-military viewpoint as follows: "The Army is not a social service center nor a curative agency. It is not a corrective school for misfits, the ne'er-do-wells, the feeble-minded, nor the chronic offend-



ers. It is neither a gymnasium for the training and development of the under-nourished nor is it a psychiatric clinic."

Perhaps Robert W. Service knew Army Regulations. At any rate, they are in six lines of one of his poems:

"This is the law of the Youkon and ever she makes it plain:

Send not your foolish and feeble: send me your strong and sane;

Strong for the red rage of battle; sane, for I harry them sore;

Send me men girt for the combat, men who are girt to the core;

Send me the best of your breeding, lend me your chosen ones;

Them will I take to my bosom, them will I call my sons."

#### AVIATION MEDICINE

G. W. NEECE, M. D.

CAPTAIN MEDICAL CORPS, FLIGHT SURGEON,  
PATTERSON FIELD

Fairfield, Ohio

It affords me a great deal of pleasure to meet with this society in Louisville. This is my first trip to the city. Coming here to talk on aviation medicine, I feel somewhat on home ground for Major Harry Armstrong, one of our outstanding flight surgeons and author of the most recent book on aviation medicine, is a graduate of the University of Louisville School of Medicine. It is personally gratifying to me, and I am sure to all of us in the service, to see you devote one of your meetings to military medicine.

In discussing the subject of aviation medicine, I am embarking on one of the newer medical specialties. In fact, it has been referred to as a "specialty of specialties" by Dr. Ralph Greene, medical director of the Eastern Airlines. I suppose some of you gentlemen might consider that quite a refinement, but it is just that. In its scope are included not only the broad field of general medicine, and preventive medicine, as applied to the aviation industry, but also special features of such specialties as ophthalmology, otolaryngology, physiology, cardiology, neurology and psychology as applied to the flying efficiency of pilots. It involves the relation and correlation of all the specialties into one special field in regard to flight. Further, aviation medicine should include research

along these lines. It is a new and fascinating field. Its development is recent, and parallels in general the development of aviation itself.

Back in about the year 1908, when the U. S. Army made its first contract for a flying machine, there was no special physical examination for the men who were to fly these machines. The ability to pass a general physical examination, and the possession of a high degree of courage by the candidate, were considered all that was necessary. However, with the rapid development of aviation during the world war, and a study of physical efficiency of the men called upon to perform flying duties, it soon became apparent that the general physical examination was not enough.

In making an analysis of aircraft casualties, England found that during the first year of the war only eight per cent were due to mechanical failure of the airplane, while just two per cent were due to enemy action. The other ninety per cent were due to failure and errors on the part of flying personnel. By studying these problems and adopting a more careful selection of pilot personnel, fatality rates in general were reduced by thirty per cent during the second year of the war, and by an additional twelve per cent during the third year. Recent accident studies show that a high percentage of accidents still are due to pilot error. These early findings and the continued development of aviation naturally stimulated further interest in aviation medicine. Aviation medicine, in other words, is a response to necessity.

With the natural awakening of interest in aviation medicine in our own country, the Medical Department was called upon to make a study of these problems. A special "Care of the Flyer Service" was instituted. Medical officers were assigned to duties with the piloting personnel. Medical officers were required to fly with the pilots, to live in close contact with them, and to share their joys and hardships. The duties of this service were to study the problems connected with flying and their effect upon the human body. Laboratories were established at the large training fields. The medical problems considered by these investigating boards fall broadly into two functions: (1) The selection of the flyer and (2) the care and maintenance of the flyer.

Army regulations called for a special physical standard for pilots for the first time in 1912. These early standards,

while low, were the foundations upon which we have been building since. From that time on our improvement in the selection of trainees has been constant and the standards gradually raised. The first research Board of our Air Service was established in 1917. Many outstanding professional men were called in to work with army doctors to investigate all the problems affecting the physical efficiency of pilots. Aviation physiology was one of the first subjects studied, and the effects of high altitude and diminished oxygen were investigated. This early work has been continued in turn by the Medical Research Laboratory, the School for Flight Surgeons, and at the present time by the School of Aviation Medicine, Randolph Field, Texas, and the Physiological Research Laboratory at Wright Field, Dayton, Ohio. An immense amount of research has been accomplished by the personnel of these institutions and as a result of their work, plus experience gained by medical officers flying, we are able to state which man should fly and which should not. We are also able to predict with some degree of accuracy which student has the ability to learn to fly.

Graduates of the School of Aviation Medicine are designated as flight surgeons, and, by army regulations, are rated as medical specialists. Only those so qualified are authorized to perform the physical examination for flying duties. Flight surgeons are assigned to air corps stations. At these stations, we have the regular functions of the medical officer to fulfill, in addition to our special duties. These include the treatment of the sick and injured, including the large group of respiratory diseases discussed by Col. Bayley before me, the administration of our hospitals, the supervision of military sanitation and the practice of preventive medicine. The flight surgeon must be a doctor first of all, and a specialist in addition to that.

To me it seems fitting that the flight surgeon should discuss his problems with a group of physicians such as this. In this connection, I should like to make a few remarks concerning the selection of pilots. Today many young men throughout the country are applying for admission to the air corps to undergo flying training as flying cadets. They travel to our stations for the physical examination. Frequently they will consult you gentlemen regarding their physical condition before undertaking the journey. Others will return to you seeking correction of physical defects which have

been found to be temporarily disqualifying. We refer a large number of applicants back to their own physicians recommending such procedures as tonsillectomy, herniotomy, submucous resection, and other measures which by correction of a remediable defect will allow them to qualify. This is done only in cases where the applicant is found physically qualified otherwise, and following the correction of temporary defects he is allowed another examination. While the examination for flying involves numerous special techniques and tests, in respect to special functions, it nevertheless appears that there should be a common understanding between flight surgeons and the civilian medical profession as to general physical requirements. Frequently we see applicants with diseased tonsils and nasal obstruction due to deviated nasal septums who state that these conditions never cause symptoms. Occasionally, the applicant's own physician will advise against surgical correction of such defects. However, experience has shown that such defects, while ordinarily causing little or no trouble on the ground to constitute a definite health hazard in regard to flying. This is due to the fact that in flying the human body is subjected to unusual hardships involving rapid changes in altitude, temperature and oxygen pressure which tend to aggravate any diseased condition of the tissues and mucous membrane of the upper respiratory tract. When one considers the importance of good respiratory ventilation under diminished oxygen supply, the importance of such defects becomes apparent. This fact has been borne out by experience gained in observing flying trainees over a period of years.

Another difficulty, often experienced, is that the examinee, in his keen anxiety to pass the physical examination, often becomes nervous, excited and generally upset. This reflects on his physical examination in various ways. His blood pressure goes up and fluctuates within wide variations, heart action is speeded up, resulting in weak and rapid pulse, he perspires freely, becomes tremulous and presents practically all the signs of neurocirculatory asthenia. This same individual in calmly and confidently consulting his own physician may appear perfectly normal. We recognize the emotional nature of such reactions and allow the young man the opportunity to relax. He is given a quiet room and allowed to lie down for thirty minutes. We try to maintain a cour-



teous and sympathetic attitude in dealing with him and conduct the examination with calmness in an effort to secure his confidence. In cases of elevated blood pressure, the applicant is rechecked on three successive days. If on these repeated observations and tests it is found that the applicant is unable to relax he is considered disqualified. Experience over a number of years has shown that trainees with a systolic blood pressure persistently above 135 fail, in large proportion, to complete their flying training. For this reason, a systolic pressure persistently above 135 is disqualifying for flying training. Nervous reactions influence the physical examination in other ways too, and often influence the ability to concentrate on some of the special tests to be performed. Recently, an applicant was found to have substandard visual acuity. He was advised to consult an ophthalmologist in regard to this in the interest of his own welfare. Presently, a letter was received from the ophthalmologist stating that the visual acuity was normal. On reexamination this was found to be true. It then developed that on the original examination, the applicant was so nervous that his eyes filled with tears during the test, and this additional refractive medium was sufficient to account for the abnormal findings.

Now, I think it should be pointed out that the examination for the selection of flying personnel is more than an inventory of physical findings. It is an evaluation of the man as a whole, including an estimation of his special suitability for a task in a new environment. It must include a careful analysis of the nervous, mental, emotional and temperamental make-up of the individual. Flying subjects man to unfamiliar environmental factors and places under his control a strange and powerful force which greatly taxes his resources. It creates thereby a new experience which is capable of providing an extraordinary test of his adaptability. Naturally, the candidate must pass a good physical examination. It is thorough, and generally not different from the regular examination required for officer personnel. But it is now known that successful flying in the military service involves more than that. It calls for a high order of physical endowment, and a peculiar neuropsychic make-up. This latter requirement is more difficult to analyze. The entire examination is rigid, and I think the reasons should be obvious. It might be stated here that avail-

able statistics indicate that only about twenty per cent of applicants examined during recent years were able to meet the special requirements of the physical examination. All applicants were young men of college age, and mostly college trained. Of this highly selected group of twenty per cent, only between forty and fifty per cent were able successfully to complete the course in flying training. Analysis of these failures reveals that they must be due to what might be called lack of flying aptitude. Flying instructors speak of it in such terms as lack of "inherent flying ability," inability to sense the "feel of the ship," "tenseness at the controls," "lack of coordination," "mechanical performance," etc. In addition, analysis of aircraft accidents has revealed a large number to be due to such factors as errors of judgment, foolhardiness, carelessness, and disobedience to flying regulations.

Aptitude for flying, or inherent flying ability, is an abstract term which does not lend itself to exact analysis. However, it is generally acceptable that this aptitude involves many specific as well as general abilities, even though quantitative values at present cannot be assigned to them. The School of Aviation Medicine has developed a flying adaptability rating test, which is, in reality, a personality study. While this test is by no means perfect, it has, nevertheless, helped to eliminate a great many potentially unsafe candidates for flying training. There remains a great deal of constructive work to be done in this field, and I believe the great advances in aviation medicine of the future will be in research along these lines.

I hope these few remarks may enlighten you somewhat in regard to this new and fascinating field of medicine, and I am very glad of the opportunity to meet with you.

#### DISCUSSION

**John D. Campbell:** I have been working with Dr. Lipscomb for a while and I think anyone who knows about his work, as a matter of fact, about the whole set-up can do nothing but admire what is going on. As some of you know, I am a psychiatric examiner at the Louisville Induction Station. I have sat back tonight and enjoyed what has been said very much; as a psychiatrist, to know that the medical profession is becoming more appreciative of psychiatry.

In this World War, psychiatric examination seems to be one of the big things, not only in medical journals but in lay journals.

As to what Dr. Neece said, I feel I knew what he was talking about when he mentioned the personality of the individual. We have re-

ceived other letters than the one Dr. Lipscomb read tonight. One from the chairman of an induction board laid us out very thoroughly for turning down soldiers from his district. He remarked that after they had finally gotten a group together, passed by local examiner, those they considered absolutely O. K.—he looked them over himself—out of that bunch, 25% were sent back! He was very much upset because one or two were negroes capable of going into a dark graveyard without showing signs of nervousness.

I think the present period marks a stage of development in psychiatry in that the field is becoming more recognized at this time.

These five types of mental derangements: the mental defectives, the schizophrenics, psychoneurotics, chronic alcoholics, and psychopathic personalities are subjects it would behoove every physician to know more about. We saw one schizophrenic who had had his appendix taken out. We frequently see psychopathic personalities who should not be working where they are working. Labor leaders are natural born trouble makers, and several I have known to be psychopaths. If these were studied they could be eliminated before they get into authoritative positions. This would make a very interesting subject. So it goes through all phases of national life. These various types should bear close observation, and this will be studied more in the future. No doubt industry will profit by the army's experience.

## SOME RECENT THOUGHTS ABOUT DIABETES

EDWARD S. WILSON, M. D.

Pineville

It is generally accepted that diabetes is a disease of metabolism created by an insufficiency of the insulin production tissue, the isles of Langerhans.

This is accompanied by an instability of the blood sugar level.

The cardinal symptoms—polyuria, polydipsia, polyphagia, and loss of weight and strength are still pathognomonic. However we are most often confronted with the question of diabetes when we have found a positive Benedicts test of the urine.

The burden of proof then falls upon the physician to determine if this be significant or not.

A fasting blood sugar of 120 mg. per 100 C. C. of blood or more will usually be diagnostic. However there may be diabetes present of a mild or moderate severity and we may still have a normal fasting blood sugar.

In this case the response of the blood sugar level should be tested by one of the dextrose tolerance tests. The one dose three hour test has been used widely in which a gram of glucose per kilogram of body weight is given and the blood sugar level determined first at the fasting level, one half hour after the dextrose and at hourly intervals after the dextrose for a period of three hours.

The peak in this test will as a rule be reached at the half hour period and should not exceed 180 mg. per 100 C. C. and should return to the fasting level between the second and third hour if the tolerance be normal.

If there be present the intolerance of diabetes the peak will be higher and will be reached at a later period and will have a much slower return to the fasting level.

This test has been largely replaced by the Exton-rose test and has replaced its routine use at the Mayo Clinic.

It requires less time, fewer blood sugar determinations and seems to be as valuable. It is described as the two dose one hour test.

As first used the fasting patient was given 50 gms. of glucose after the fasting blood sugar had been determined and one half hour later another blood sugar determination was made and a second 50 gms. of glucose given. This was followed in 30 min. by another blood sugar determination. It is now used with only two blood sugar determinations, the fasting blood sugar and the blood sugar one hour after the first dextrose dose. If the blood sugar rises to a level of 180 mg. or more the case is diabetes. If less than 160 it is not diabetes. If between 160 and 180 after repeating the case is diagnosed "diabetes suspected" and the patient should be examined from time to time and should abstain from excessive sugars and starches.

The tolerance tests are used only where the diagnosis is in doubt as damage may be done by the large dose of dextrose.

The test is given to the patient in the morning and he must not have received breakfast. Too, it is quite important that he must not have been on a restricted diet for the preceding three or four days, nor should he have been receiving insulin.

The newer insulin commonly known as protamine-zinc insulin has placed a useful agent in our hands for the treatment of diabetes. We are all more or less familiar with this preparation and know that its advantages lie in the fact that it is much slower in action than the regular insulin. The regular insulin or old insulin is thought



of as having a relatively quick action after being administered and ran its effect in a period of about eight hours. Thus many cases required as many as three injections a day in order to get its effect distributed properly. The protamine-zinc insulin is considered to have an effect over about 24 hours but is much slower. Thus only one injection is required when it is taken, this at the same time being an advantage and also a disadvantage in that in many cases it alone is insufficient in the food absorptive period. Dr. Wilder at the Mayo Clinic has almost all of his patients on the protamine zinc insulin. However, to many he gives both types of insulin. I believe that he is somewhat of a pioneer in that he has his patients to mix the regular and protamine zinc insulin in the same syringe to be administered in one injection. This comes as a surprise to many of us who have been warned against this. The literature issued with the insulin preparations are also emphatic about not mixing the insulins. Dr. Wilder has found this mixing of the insulins to work out quite satisfactorily and we have been pleased with it in the few cases that we have used it in.

The basic features of the use of the two insulins is that the protamine zinc is given in sufficient dose to care for the patient from one before breakfast period to the next, and enough plain or regular insulin is given to carry the patient to the before supper period.

Dr. Wilder and his group feel that to attempt to maintain a diabetic with a sugar free urine is a mistake except in very rare cases. Heretofore, the generally accepted method was to give the patient a diet that would maintain him in a condition a little underweight and to strive to keep the urine sugar free. As now used, the patient is given a fairly liberal diet that meets the caloric requirements of the patient, based on height, weight, age and activity, and attempts to maintain the patient at the ideal weight. All except the mildest cases are required to weigh their food. The diet contains a moderate amount of carbohydrate and may vary with different patients from 121 gms. to 167 gms. The protein from 57 to 84 and the fat may run as high as 200 gms. The fat is the most variable factor to adjust the number of calories supplied.

The patient is permitted to have small amounts of sugar in his urine. In this he avoids any danger to a large extent of insulin reactions which reactions are now believed to not be without harm. To attempt to keep the patient sugar free while

using protamine zinc insulin necessitates almost constant testing of the blood sugar. To attempt to keep the patient in a state of slight under nutrition is to invite complicating conditions such as tuberculosis and certainly does not add to the feeling of well being of the patient.

We have all been confronted with the problem of what to do when we have gotten our patients sugar free. Are they now getting to much insulin and are they soon to be confronted with an insulin shock?

The method of insulin dosage boils down to this. The urine is tested twice a day, before breakfast and before supper. The two insulins are given at one injection, mixed, before breakfast. The A. M. urine test determines the dose of protamine zinc insulin and the P. M. urine of the day before determines the dose of regular insulin. The patient keeps a chart of the urine tests and insulin doses from day to day. If the A. M. urine is 0 or 1 plus the dose of protamine zinc insulin is reduced 4 units from the dose of the previous morning. If 2 plus, the same dose is given. If 3 or 4 plus the dose is increased 4 units. If the P. M. urine sugar test of the preceding afternoon was 0 or 1 plus the dose of regular insulin of the preceding morning is reduced 4 units, if 2 plus the same dose is given and if 3 or 4 plus the dose is increased 4 units.

By following this rule some of our patients have gradually reduced their insulin to a minimum of 6 units on which it is desirable to carry them regardless of the urine, even should it be 0.

One of our patients had experienced reactions at night when he had taken enough protamine zinc alone to carry him through the food absorptive periods. He has been exceedingly well pleased with the mixing of the insulins and we have been likewise gratified in the much more satisfactory adjustment of his case.

Many have expressed the belief that unless the hyperglycemia be completely controlled that there is a dangerous disposition to premature arteriosclerosis and also infection.

Dr. Wilder does not seem to be wholly in agreement with this, and has shown over a period of several years that when insulin is acting in the body a certain degree of glycosuria is perfectly compatible with the well being of the patient, and too, that diabetic children recently treated by this method have had entirely satisfactory growth.

#### REFERENCE

"Clinical Diabetes Mellitus and Hyperinsulinism." Wilder.

## NON-OPERATIVE GYNECOLOGICAL CONDITIONS OF INTEREST TO THE GENERAL PRACTITIONER

EDWIN P. SOLOMON, M. D.

Louisville

I do not intend to give any detailed therapeutic discussion but shall attempt to mention some of the more common, non-operative gynecological conditions, and indicate briefly the method of management we most often use.

Vulvo-vaginitis of gonorrheal origin in children is a condition very wide-spread and commonly encountered. The treatment for this malady has changed completely in the past decade, since the inauguration of hormonal therapy; and more recently since sulphanilamide has been revived, it has come into use in the treatment of this condition. Despite occasional good results with sulphanilamide and other drugs, the estrogenic hormone has given a larger percentage of cures than anything else. The most effective manner of treating these children is with estrogenic suppositories of 1000 I. U. strength. They should be inserted vaginally daily for eighteen to twenty four days. A case can be considered cured only after obtaining four negative smears made at weekly intervals. Many cases are cured after one course of treatment, but unfortunately recurrences do occur. The course of treatment must be repeated until a cure is effected.

Vaginitis in adults is also encountered quite frequently, but not the gonorrheal type, for the vaginal mucous membrane of the woman in the child-bearing age is remarkably immune to the gonococcus. In adults, the vaginitis is most often due to the trichomonas, monilia or streptococcus subacidus. In women at, near, or beyond the menopause, atrophic or senile vaginitis is common. I have never gotten the results many men report or those that the various pharmaceutical houses claim with such remedies as Devegan, Floraquin, Silver Picrate, and the like. I have used them frequently and prefer Floraquin to the others, but would place my cures at around 75%. I have seen cases showing rather marked local reaction to Silver Picrate. My best results in treatment of vaginitis in adults, be it trichomonas or monilia has been with gentian violet. The vagina is thoroughly cleansed with green soap, dried well, and then 3% aqueous solution of gentian violet

is applied to the cervix and vagina. The drying of the vagina is an important part, I believe, and occasionally in resistant cases I use ether to more thoroughly dry the vagina. Perhaps its antiseptic value does more than I give it credit for. This treatment with green soap and gentian violet is done in the office every other day until relief is afforded: three or four treatments is the average necessary. The patient is given lactic acid or vinegar douches to be taken at home daily. I urge all patients with vaginitis to continue their douches daily during the first menstrual period and have them return to the office immediately after the period for one local treatment whether or not symptoms are present. As you know, recurrences are frequent, and acid douches during menstruation will do more than anything I know to minimize the incidence of these recurrences. Recently there has appeared a report of the treatment of vaginitis with an ozonide of olive oil with excellent results. I am at present trying this method and can make no personal report at this time.

The atrophic or senile vaginitis is to me an agreeable condition to treat, inasmuch as it responds promptly to estrogenic hormone therapy. Here again we use a suppository containing 1000 I. U. daily until a cure is obtained, which is usually after seven to ten days; symptoms are usually completely relieved after two to three days. If these patients present menopausal symptoms together with vaginitis, estrogen is also given intramuscularly.

Cervicitis is no doubt the most common lesion of the female generative organs, and I cannot urge you too strongly to always keep in mind the possibility of carcinoma, regardless of the patient's age. I think that any lesion of the cervix that bleeds easily, regardless of its size, shape, or consistency should be biopsied. With a biopsy punch, a small piece of tissue from a suspicious area can be obtained very easily by the physician and almost painlessly for the patient. I have tried most of the chemicals advocated in the treatment of cervicitis; 50% silver nitrate I believe is the old reliable from a chemo-therapeutic standpoint, but the actual cautery is by far the most effective weapon in curing a cervicitis. Deep cauterization is often necessary, but extreme caution should be taken to avoid the cervical canal, for stricture of the cervix is caused by cauterization more than any other one thing, and a sound should be passed through the cervical canal at least once or twice at six week in-



tervals after any cauterization.

For the treatment of dysmenorrhea, I shall not mention the analgesics and antispasmodics with which you are all familiar and which certainly give temporary relief. For more lasting relief I have been pleased with the anterior pituitary like hormone, marketed under such trade names as A. P. L., Antuitrin S, Koratrin, etc., being personally preferable to the first. We give 200 rat units every other day for five doses beginning about ten days before the onset of the period. Usually after two or three successive courses of therapy, the patient obtains relief for from six months to a year and sometimes more. The corpus luteum hormone, such as proluton, progestin, lipolutin, etc. may also be used giving one milligram per dose. This treatment is more substitutinal and frequently less lasting. Testosterone propionate has given good results in the treatment of dysmenorrhea. Four to six 25 mg. doses of this should be given pre-menstrually. Here again, my results have been palliative only, and relief is obtained only during those months in which treatment has been given.

In speaking of dysmenorrhea, I shall mention the only operative procedure referred to in this paper, but it is so frequently successful in these cases that I cannot refrain from so doing. I have reference to the stem pessary. In my hands, this has been successful in many otherwise intractable cases, and is certainly a minor operative procedure. I do not believe that a D and C should ever be done alone for dysmenorrhea, but always a stem pessary should be placed in and left for two to three months.

The treatment of amenorrhea is one of the most perplexing of all the endocrine disorders. Frequently, of course, it may be due to pregnancy or some other organic cause, and these cases promptly respond when the cause is removed. In passing, may I mention that fibroids occasionally are responsible for amenorrhea. Functional amenorrhea may be primary or secondary, and in either case the direct cause lies in the failure of ovulation. Hypothyroidism is a common cause of this, and all of these patients with a low normal or abnormally low basal metabolic rate should be given thyroid extract. These patients should certainly be given a complete examination, and any systemic disease should be corrected. It is easy to make these patients bleed with large doses of estrogen, but this will not be true menstruation, and continued treatment is necessary. Cyclic administration of estrogen and progestin, giving

the former for two weeks followed by the latter for two weeks, will also produce bleeding and sometimes true menstruation. Here again, the bleeding usually ceases when treatment is discontinued. Pregnant mares serum such as gonadogen, gonadin, or anteron is the most sound therapy, but even this has not given the results predicted after its introduction. To establish regular menstruation with this, frequently requires long continued treatment. Low dosage irradiation to the ovaries has been used with some success in these cases, but again the results are variable, and unless given by an expert roentgenologist can be disastrous.

Abnormal uterine bleeding causes many women to consult their physician. Functional bleeding is most common at the two extremes of woman's reproductive life, namely, at or around puberty and at or near the menopause. Increased bleeding at the menopause is never normal, and it is wrong indeed to tell any woman that menorrhagia at this time is a normal accompaniment to the "change of life." Every case of increased bleeding in women over thirty five years of age should have a curettage before any medical therapy is given and in this way only will carcinoma of the fundus be diagnosed early. In the young age group such a procedure is not necessary. If pelvic examination fails to reveal any pathology in these women, one is justified in assuming that the bleeding is functional in origin, and treatment accordingly may be administered. Most of the hormones have been used for the treatment of functional bleeding, but in my hands the most uniformly successful treatment has been with the anterior pituitary-like hormones, such as A. P. L. and Korotrin (formerly Antophysin). We give 200 rat units daily in the presence of bleeding and begin this same therapy at the onset of subsequent menstruation; this controls a high percentage of these cases. Testosterone propionate also may be used in these conditions, giving 25 mg. doses daily; one should not give more than 300 to 400 mg. to any one patient in any one month. Many other procedures are frequently necessary in these cases, but one of the above will control many of these cases.

Pre-menstrual headaches are a complaint of many women. These headaches are often occipito-cervical, and sometimes they simulate migraine. Frequently breast pain is an annoying pre-menstrual symptom. Most of these cases respond to estrogenic hormone therapy and 200 rat units given

every other day beginning 10 to 12 days prior to the expected onset of menstruation will benefit most of these patients.

The treatment of the symptoms of the menopausal syndrome has appeared too frequently in the literature to warrant discussion here. Suffice it to say that therapy with estrogen is the generally accepted treatment and gives most satisfactory results. Allow me to add only that the new synthetic estrogen, stilbestrol, is giving satisfactory results from oral therapy and soon should be on the market for general use.

In speaking of oral hormone therapy, I wish to mention a product that has given satisfactory results in our hands, namely, Pranone. This product is identical in action to progesteron, the corpus luteum hormone, and we use it in cases of threatened abortion with, thus far, many happy results. I do not hesitate to recommend it in any case where progesteron therapy is indicated. Incidentally, in cases of threatened abortion we almost never use morphine any longer, but resort only to progesteron, occasionally even giving it intravenously in an aqueous solution.

In closing, may I mention what is to me a most distressing type patient to treat: the sterility patient. I see a great number of women who have been unable to become pregnant; seemingly an increasing number. Approximately one third of my cases of sterility are the fault of the male partner, and before a woman is examined, we insist on an examination of the husband. In many cases of prostatitis, oligospermia or aspermia, response to massage and administration of pregnant mares serum is occasionally spectacular. In examination of the woman, any obvious pathology is corrected if possible. Any vaginitis or cervicitis is cleared up and retrodisplacements corrected with a well-fitting pessary. Retrodisplacement of the uterus alone is an infrequent cause of sterility and has been overemphasized, I believe. A Rubin test is done on these women to determine tubal patency, and an endometrial biopsy is done on the first day of menstruation in an effort to determine if ovulation has taken place. Occasionally I have seen cases where the carbon dioxide fails to get through the tubes at the first examination, but on repeated attempts they become patent and pregnancy ensues. In the anovulatory cases, pregnant mares serum offers some hope, but its results have not been good in many cases of mine, and long continued treatment is often necessary.

## PERFORATED PEPTIC ULCER

R. ARNOLD GRISWOLD, M. D.

Louisville

This report is an analysis of 111 consecutive cases of perforated peptic ulcer admitted to the Louisville City Hospital from 1931 to 1940, with a description of our present treatment. The importance of the streptococcus in relation to mortality is stressed and the local implantation of sulfanilamide is advocated. No comparison with statistics from elsewhere is attempted in this paper.

These patients were all charity patients from the low income groups. There were 107 males and 4 females, 82 white and 29 colored. Corrected for the larger number of white patients admitted to the hospital, there was a ratio of white to colored of 4:3. Using the conventional grouping of months for the seasons, there were 37 cases in the spring, 28 in the fall, 24 in summer and 22 in winter. The ages ranged from 18 to 73 with a median of 37.

There was no history of previous indigestion in 12 cases. In the others, ulcer symptoms had existed from 3 days to 30 years, with a median of 4 years. Four patients had had ulcer symptoms 2, 3, 11 and 12 years before and then were symptom-free until perforation. One patient had been operated on elsewhere for a perforation 3 years before we saw him. Another was operated upon twice by us for perforation with an interval of 2 years. Sixty-one patients had used alkalies, frequent feedings or both for the relief of symptoms, and 18 had been exposed to active medical treatment sometime or other. Three patients were on active Sippy regime with subjective relief at the time of perforation.

Definite increase of symptoms, 3 to 10 days before perforation, occurred in 68%. Alcohol, particularly in the form of beer, seemed to be the precipitating factor in 11 patients. Perforation occurred during sleep (5 patients), at work, on an empty stomach and after meals. Only 65% had vomited after perforation and then usually only once or twice.

The temperature on admission varied from 96.5 to 103, averaging 98.8, 55% having a slightly subnormal temperature. The pulse rate averaged 94 and respirations 26 per minute. The average admission blood pressure was 129/79 mm. of mercury, only three patients being in shock, as indicated



by blood pressure. Two of these were moribund and died within 2 hours after admission. The small incidence of shock is emphasized because of the general impression that shock is characteristic of perforated ulcer. The presence of pallor and cold, clammy skin has caused many examiners to write, "patient in shock," while recording a blood pressure of 120/80 with a pulse of 80. The fact that shock may, however, be imminent and easily precipitated, is shown by 3 patients in this series who were thrown into severe vascular collapse by spinal anesthesia. Blood concentration studies would be of interest in this connection.

Roentgenograms in the erect position showed subphrenic gas in 73 of the 97 patients so examined. Seventy-eight per cent had flat abdomens with generalized rigidity. Eight patients had distention on admission and all died of peritonitis. The remainder had spacticity in the upper epigastrium and often in the right lower quadrant. This latter finding led to 7 preliminary diagnoses of acute appendicitis.

Nine patients in this series were not operated upon for closure of a perforation. Three of these with perforations of 7, 7 and 6 days duration, were moribund on admission and died within a few hours. One, admitted 31 hours postperforation, had sealed off his ulcer and recovered under conservative treatment. Two, with perforation of 10 and 12 days duration, were admitted with subphrenic abscess, empyema and pneumonia. They succumbed. Three refused operation. Two of these remained in the hospital 5 to 7 days, sealed off their ulcers spontaneously and recovered. One left the hospital the day of admission and has not been traced. This is not, however, an argument for conservative treatment. One patient in the operated group, whose ulcer apparently had sealed off, on admission, was treated conservatively for several days. It perforated again and he died following closure.

One hundred and two patients went to the operating room. The relationship of age to mortality in this group is shown in Chart I and of hours between perforation and operation, in Chart II. These relationships are not unusual.

**ANESTHESIA:** Eighty-eight patients were operated upon under spinal anesthesia. This has been discontinued in the later cases because of 2 deaths on the table and one shortly postoperative, due to vascular collapse. These patients were 58, 61 and

69 years of age and had been perforated 3 days, 3 days and 7 hours, respectively. Eight patients were given general anesthesia and the last 6 have been done under novocaine subcostal block.

CHART I

Age	Died	Lived	Total
15-20	0	3	3
21-25	1	11	12
26-30	2	14	16
31-35	1	17	18
36-40	5	9	14
41-45	1	8	9
46-50	1	5	6
51-55	1	7	8
56-60	2	4	6
61-65	4	2	6
66-70	2	1	3
71-75		1	1

CHART II  
HOURS POST-PERFORATION

Age	Died	Lived	Total
1-6	2	44	46
7-12	6	30	36
13-18	4	1	5
19-24	1	3	4
25-48	1	2	3
48 plus	6	2	8

**LOCATION OF ULCER:** The site of perforation was recorded as being duodenal, 56 times, gastric 45 times and jejunal, once. This distinction, however, is not exact. Anatomical landmarks, such as the pyloric vein, are often obscured so that the differentiation between duodenal and gastric lesions is inaccurate and may be impossible.

**INCISIONS:** During the past few years, principally in an attempt to decrease wound and pulmonary complications, we have changed from the right rectus to the transverse incision, first the Singleton or Sanders muscle retracting type, then the muscle cutting incision advocated by Lynn and, finally, one-half the Lynn incision. This is a short, high transverse or oblique skin incision over the right rectus which cuts all layers transversely. This small incision gives adequate exposure for suture of an ulcer and may be extended to care for any lesion in the upper abdomen if necessary. It allows painless respiration, encourages adequate pulmonary ventilation and heals well.

**OPERATIONS:** The different types of operation carried out and their mortality rates are shown in Table I. With three exceptions, these were all carried out by the resident staff of the Louisville City Hospital, under only moderately close supervision.

TABLE I  
OPERATIONS

	Lived	Died	Total
Simple closure			
Lembert or Cushing	40		
Purse String	20	60	12
Excision and pyloroplasty	20	6	26
Purse string and enterostomy		1	1
Purse string and gastroenterostomy	1		1
Subtotal gastric resection	1		1
Spinal death before closure		1	1
Total	82	20	105

It is evident that simple closure carries a lower mortality than excision of the ulcer with transverse suture (pyloroplasty). Follow-up shows that this more radical procedure is no more likely to prevent recurrence of the ulcer than is simple suture. Of the 20 patients who survived excision and pyloroplasty, there have been 5 (25%) known recurrences, with 2 subsequent resections. In the group of 60 simple closures there have been 11 (18.3%) known recurrences. The one closure with gastroenterostomy was followed by gastrojejunal ulcer. The patient who underwent resection was free of symptoms after one year. This patient was in the hospital for resection and perforation occurred on the ward early the morning of operation.

It is felt that simple closure, with Lembert or Cushing sutures when necessary, following the procedure described by Gatch, is the preferred operation. Purse string closure is more apt to encroach upon the lumen of the pylorus. One of the patients in this series whose perforation was closed by two chromic catgut purse string sutures, had a stormy convalescence on account of pyloric obstruction. He was readmitted to the hospital a year later on the medical service and died of obstruction, without surgery.

**DRAINAGE:** Intraperitoneal drainage was used in only 7 cases, twice in the upper abdomen, 3 times in the pelvis and once in both. Such drainage was used principally in late cases (6, 8, 16, 20, 48, 84 hours and 5 days) and with decreasing frequency in recent years. Four of the 7 drained cases ended fatally. Drainage of extraperitoneal tissues alone was employed in 14 cases. This has been discontinued since the use of sulfanilamide, as will be described later.

**BACTERIOLOGY:** Culture reports from the peritoneal fluid were available in 65 instances. No growth was reported 34 times. The streptococcus or streptococcal mixtures were reported 18 times, staphylococcus 7 times, colon bacilli and diphtheroids twice each, bacillus aerogenes and pneumococcus once each. There was some correlation between the hours post-perforation

and positive cultures but this was not as marked as might be expected. Negative cultures were reported in cases from 1 to 72 hours post-perforation with a median of 5 hours, while the infected cases ranged from 1 to 84 post-perforation, with a median of 8 hours. The influence of positive culture, particularly streptococcus on mortality, was much more marked than can be explained by the slight increase in time. Of the 31 cases with positive culture, there were 9 fatalities. Eight of these were associated with streptococcus. Of the 34 patients with negative cultures, only 3 died. These three were operated upon 14, 19 and 72 hours after perforation. Two of the 3 died of pulmonary complications and the third was one of the spinal anesthesia fatalities.

The relation of bacteriology to mortality is shown in Table II.

TABLE II  
BACTERIOLOGY AND MORTALITY

	Lived	Died
Streptococcus	10	8
Staphylococcus	6	1
B. Coli	2	0
Diphtheria	2	0
B. Aerogenes	1	0
Pneumococcus	1	0
No growth	31	3
No culture	29	8
Total	82	20

**CAUSES OF DEATH:** The chief causes of death were as follows:

TABLE III

Peritonitis	10
Pneumonia	4
Atelectasis and pneumonia	2
Circulatory collapse (spinal)	3
Streptococcus septicemia	1
Total	20

**COMPLICATIONS:** Two of the patients who died lived a sufficient length of time to observe the progress of wound healing. In these 84 patients, wound results were as follows:

TABLE IV

Primary healing	55
Wound infection (1 hernia)	28
Wound disruption	1
Total	84

Non-fatal complications, aside from peritonitis and wound infection, were: pneumonia 2, delirium tremens 2, massive atelectasis 1, parotitis 1, postoperative pyloric obstruction 1.

**THE USE OF SULFANILAMIDE:** As soon as this survey was well under way, the close relationship between the streptococcus and



mortality was evident. Accordingly, the local use of sulfanilamide in this as well as in other contaminated abdominal conditions, seemed advisable. This drug has been advocated by Jensen and others in contaminated wounds of the extremities. For the last several months we have used it in the abdomen whenever contamination was present, including such conditions as perforated peptic ulcer, perforated appendicitis, gunshot wounds of the abdomen, or on other occasions when the lumen of the gastrointestinal tract was opened. The amounts used have been 5 to 10 grams of sulfanilamide crystals in and around the lesion in the peritoneal cavity, and 2 to 5 grams in the abdominal wall. The results in the last 17 cases of perforated ulcer and in other abdominal lesions have been encouraging. In the 17 perforated ulcers in which sulfanilamide was used locally, there was one death. This patient had been perforated 3 days and collapsed following spinal anesthesia. There were three mild wound infections. Sulfanilamide by other routes was not used in these cases, as we wished to study the absorption of the drug from the peritoneal cavity. This absorption is quite rapid. Estimations of blood concentration usually show a peak of 6 mg. or more per hundred c. c. of blood in about 4 hours, with gradual disappearance from the blood stream within 24 to 48 hours. One patient, not included in this series, who had 10 gm. planted in the pelvis and 5 in the abdominal wall, reached a concentration of 22.4, five hours after implantation. Peak concentrations of 10 mg. or more are not unusual. A typical blood curve is shown in Table V.

TABLE V SULFANILAMIDE BLOOD CONCENTRATIONS			
C. Q. No. 15439	7-8-40	5 grams implanted	
1:20 a. m.		Free	Total
5:30 a. m.		6.20	7.42
9:00 a. m.		5.29	6.44
12:00 m.		4.44	6.20
3:00 p. m.		3.45	6.20
6:00 p. m.		2.30	5.29
9:00 p. m.		2.00	3.26

The high blood concentrations obtained would suggest systemic as well as local effect from the drug, although it seems likely that the saturated solution in the peritoneal cavity in direct contact with the bacteria is most effective. Maintaining the high blood concentration by other routes is, of course, advisable.

PRESENT PROCEDURE: Our present treatment has been evolved gradually from our own experience and a study of the literature. It is as follows:

1. A short transverse incision under novocaine block anesthesia supplemented when necessary by a small amount of cyclopropane.
2. Thorough removal of intraperitoneal fluid, including that in the pelvis by suction rather than sponges.
3. Simple closure of the ulcer with two layers of interrupted silk sutures from the proximal to the distal side of the ulcer, so as not to encroach upon the lumen of the pylorus. This suture line is reinforced by catching omentum in the outer layer of sutures. The procedure advocated by Gatch is utilized when necessary.
4. Five to ten grams of sulfanilamide crystals are sprinkled about the lesion and 3 to 5 grams are planted in the abdominal wall.
5. No intraperitoneal drains are used.
6. The abdominal wall is closed in layers with silk without drainage and a non-constricting dressing applied.
7. A Levine tube is passed into the stomach just before or after operation to remain 24 to 48 hours. If ileus from peritonitis supervenes, the use of the tube is continued.
8. If the peritoneal culture shows streptococcus, sulfanilamide is pushed by any available route.
9. Pulmonary complications are combated by such measures as frequent turning of the patient, carbon dioxide inhalations and bronchoscopic aspiration, if atelectasis occurs.
10. Salt and fluid balance are carefully controlled.
11. Transfusions of blood or plasma are used freely when indicated.

SUMMARY

1. Analysis of 111 cases of perforated peptic ulcer shows that, aside from the age of the patient and delay in operation, the most important factor in mortality is the presence of the streptococcus in the peritoneal cavity. Next in importance are pulmonary complications.
2. The use of sulfanilamide locally and systematically is advocated.
3. Our present method of treatment is described.

DISCUSSION

M. J. Henry: It was surprising to hear the essayist state that twelve of his patients gave no history of previous stomach complaint. It has been my experience that when one operates for

a so-called "Acute Abdomen" and finds a perforated peptic ulcer, one can upon proper questioning after operation obtain an account of symptoms which could easily be construed as arising from a peptic ulcer. Upon admission these patients are in so much distress that they are unable to give a good history. I should like to ask Dr. Griswold about the efforts made by his staff to get such a history during the patient's convalescence.

**Misch Casper:** In this particular type of case, the surgeon is in absolute dependence on the general practitioner for diagnosis. I should like to stress the symptoms a little bit more. It is surprising really how many diagnoses are made by the general practitioner now. Formerly, we diagnosed perforated ulcer as appendicitis, and we found perforated ulcer after the abdomen was opened. I have made that mistake myself. Now, the diagnosis is made by the general practitioner. The first symptoms are different from those of appendicitis, they are more sudden, and the pain is much more violent. If you rely on morphine, you know that it takes a great deal more morphine to control the patient; certainly, no morphine should be given.

The most important symptom is the rigidity, always early and much more boardlike than in appendicitis or any other lesion excepting acute pancreatitis. Perforated ulcer also gives deep and severe pain. The blood count rises earlier and higher in perforation than in appendicitis. The patient shows an extreme degree of shock, which is nearly always present.

I feel very much like Dr. Griswold that, in a good many cases, taking the history afterward, one finds absolutely no history of ulcer previously. I have had it happen at least twelve times.

Strange to say, a doctor just called me on the phone that a patient with perforated peptic ulcer was on the way to the hospital. I told him I expected to learn something from this paper. It is always a pleasure to hear Dr. Griswold, who said, in a paper read at Richmond, Virginia, "There is no star dust for treatment of wounds." I do believe that sulfathiazole and sulfanilamide are almost "star dust" in septic abdomens. Many bad, septic abdomens with perforated ulcers now get well that did not before.

One caution to the young men: Don't do too extensive surgery in these very sick patients. Do the operation simply and quickly as possible: close with purse-string, lay over an omental graft, then get out. "Get in quickly and get out more quickly" holds more true in perforated ulcer than in appendicitis and almost all other acute abdomens.

**J. Duffy Hancock:** I think Dr. Griswold is to be congratulated on this group of cases which he has reported. He not only gave us an excellent resume of the subject but also made some sugges-

tions well worth while. Some of them we don't attach as much importance to as he does, others we might debate about, but the one in regard to the use of sulfanilamide cannot be questioned. The result of that treatment speaks for itself.

As far as drainage is concerned, the peritonitis in the first six hours is largely chemical and drains are usually not indicated. Those older than six hours, may have peritonitis, which is purulent and may warrant drainage.

I prefer the usual longitudinal type of incision but it is possible the transverse is more desirable. I feel as Dr. Griswold does about anesthesia, i. e. spinal is a mistake because even though the patient is cold and clammy we may be misled by a normal pulse rate and blood pressure when the patient is first examined and not be prepared for the sudden circulatory collapse which may occur.

The outstanding contribution of this paper is the results obtained after the use of sulfanilamide. The statistics presented cannot be just an accident. All of us should feel obliged to use sulfathiazole or sulfanilamide powder in similar cases upon which we operate in the future.

**Virgil E. Simpson:** The statistical study by the essayist offers several features of interest, but that part referring to the seasonal incidence of deaths is peculiarly so. Seasonal incidence of recurrence of subsequent activity of peptic ulcer has long held a place in the literature on this subject. One would feel that there must be some basis for a conclusion so long and so generally accepted; if reason bears any causal relationship to recurrences it would be logical to conclude that it must in turn influence deaths.

I was also interested in the percentage of positive and negative bacteriological studies. It would seem reasonable to conclude that in the group where no organisms were found that some other cause than infection played the determining role. That some peptic ulcers are due to infected emboli and others to implantation of germs in the mucosa of the peptic area is surely true, but the larger per cent of ulcers are but the local expression of a condition. If the ulcer is not the disease but a symptom, then the physician and the surgeon must not stop thinking in terms of therapy when the ulcer has been excised or the perforation closed.

In discussing perforation it is germane to inquire if there be any danger signals of its imminence. I am sure that the character and degree of pain has some significance; I think I have observed that when pain becomes more constant, more of a dull, boring character, when it is no longer relieved by reduction of the acidity by alkalis, when food offers no relief, then the ulcer has in all probability made headway in the muscular coat and surgery may well be instituted.

Finally, I was very much interested in the ref-



erence to the local use of the sulphone group and the deductions therefrom. It is an accepted fact, I think, that these chemicals are not germicidal; a saturated solution of sulfanilamid has no deterrent influence on the growth of streptococci in a culture tube. Its killing power on streptococci in the body must come through the activation of some other factor or factors not yet known. And what the optimal concentration of the drug in the blood stream is has not yet been agreed on. Some clinicians fix it at 6 mgms. per 100 c. c. of blood, others demand 8. Patients recover with concentrations below and above both extremes. I have seen pneumonias die with a concentration of sulfapyridine of 19. What is the optimal? If one of these drugs is given intravenously at the time of operation, will the desired percentage of active agent be less quickly attained than the drug be sprinkled over site of the perforation? If the drug has no local action it can affect the germs in the tissues only after it is absorbed into the lymph or blood vessels. Will this be any more quickly accomplished by its topical application? Another feature of the peculiar behavior of these chemicals is that each member seems to have some selective action on certain kinds of germs. Sulfanilamid is impotent with staphylococci, sulfapyridine acts more effectively on pneumococci; sulfathiazol is not the agent of choice in a streptococcic infection. Would the surgeon care to delay his mechanical procedure while the bacteriological data is accumulated?

**D. Y. Keith:** We feel that a large percentage of cases should have shown free gas in the abdomen. 82 out of 97 cases, we do not believe, represent the true value of roentgen examination if viewed in both erect and lateral positions.

For more than one year we have been examining many of our cases and all that are negative in erect posture by observing them on A-P plane and horizontal position. This position will show the free air in the abdominal cavity along the lateral abdominal wall will frequently show inflammatory changes in the diaphragm and the lung immediately above the diaphragm, neither of which can be shown with the patient in erect posture. This procedure we would recommend in all cases that are negative when reviewed in erect posture. This is particularly true when the free air is on the left side and there is gas in the cardiac portion of the stomach and splenic flexure of the colon. Free air in the abdominal cavity with the patient lying on the right side will show a thin rim of air that is isolated from both stomach and colon.

**R. Arnold Griswold** (in closing): As to the previous ulcer history, we did go back postoperatively and try to get such a history, but in a relatively small percent (12%) we could get no admission of previous digestive symptom. We have not used drainage for several years and when we

did use it, it was usually a suprapubic drain to remove collections of fluid from the pelvis. We are, however, very careful to suck out all free peritoneal fluid at the time of operation. We have no particular objection to drains but are quite certain that they do no good. We do object to the use of gauze packs or heavy drainage tubes after suture of a perforated peptic ulcer because the use of such material is often followed by duodenal or gastric fistula. Dr. Gray asked me about the intercostal block anesthesia. Babcock described this in S. G. & O. a few months ago. We use 5 c. c. novocaine in the midaxillary line at the lower borders of the 7th, 8th, 9th and 10th ribs.

As to the seasonal incidence, our figures do show the largest number in the spring and the second largest number in the fall.

Drugs of sulphonamide group applied locally to infected lesions are engaging much attention. It does seem to have a greater effect than when the same drug is given by mouth or intravenously. This is probably because when we put sulfanilamide or sulphathiazole into the peritoneal cavity, we have in the peritoneal fluid a saturated solution of the drug which is many times higher than the concentration that we can get at the site of the lesion by other means of administration. In this condition, as in other types of peritonitis, the organisms are growing in the fluid where they are much more easily reached by local implantation. The first case of local implantation of a sulphonamide drug in Louisville that I know of, was in the patient with empyema treated by Dr. Simpson and myself in 1937 or 1938. In this case, we aspirated the pus which was streptococcic, and injected prontosil into the pleural cavity. The results were very encouraging and the patient recovered without surgical therapy.

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**Syphilis and Alcoholism.**—In order to determine the incidence of syphilis among alcoholic addicts, Orenstein and Goldfarb obtained a detailed history of venereal infection or treatment and a blood Wassermann test on discharge of 1,001 consecutive admissions to the alcohol words of Bellevue Hospital. The percentage of syphilitic infection among 680 white male patients was 3.3, and among the 100 Negro males it was 30. There were evidences of syphilis in 8.5 per cent of the white female patients and in 55 per cent of the Negro women. This is in contrast to the incidence of syphilitic infection among the white population, which has been variously reported from 1 to 4 per cent and up to 15 per cent for Negroes. The authors believe that the especially high incidence of syphilitic infection among the women is related to the fact that they are exposed to sexual aggressions while intoxicated.

MENINGITIS, PNEUMOCOCCUS  
TYPE III, WITH RECOVERY

JOHN STITES

A. E. BELL

F. K. JELSMAS

Louisville

Patient, E. H. C., male, white, age 35, married, insurance business. Was seen at home because of a bad cold of two days duration and a dry, hacking, non-productive cough. He was given symptomatic treatment and was seen again the following afternoon. At this time he was complaining of pain in the right ear and examination showed a red, bulging drum with a small perforation. This ear had been deaf since early youth secondary to scarlet fever and several other abscesses at various times. The help of an otologist was requested and he enlarged the opening in the drum and obtained satisfactory drainage.

The patient progressed satisfactorily until about a week later at which time he began to have increased pain in the ear and vague pains in the right side of the head. Dr. A. E. Bell hospitalized the patient and x-ray at this time showed "mild effusion of the tip cells with apparently some cell wall destruction in the region of the antrum. There is no cell wall destruction in the tip cells. Comment: Effusion of the mastoid with probable cell wall destruction in the antra." White blood count at this time showed 13,600 with 88% polys. Urinalysis was negative. The patient was given sulfathiazole grs. xv every four hours, the ear irrigated every three hours and otherwise treated symptomatically. The fever dropped from 100.6 on admission to normal in three days and on being dismissed he was symptom free.

With the exception of occasional vague pains in the right temporal region which seemed to be relieved by inflating the Eustachian tube, the patient seemed to progress satisfactorily. Sixteen days after the first x-ray a check x-ray was taken, and this showed no additional changes. Patient continued to have mild pain in right temporal region at times, but on 2-10-41 (about 36 days after the first evidence of mastoiditis) he came in to see Dr. Bell again complaining of intolerable pain in the right side of his head. There was no positive evidence of an acute mas-

toid process so he was referred to Dr. Franklin Jelsma for neurological examination. His examination showed no evidence of intracranial pathology other than elevation of the blood pressure to 165/100 but the patient was complaining of severe headache and had a blood count of 10,500 with 90% polys so he was hospitalized at 5:00 p. m. X-ray of the right mastoid at this time showed "diffuse increase in density there being definite increase in density of the tip cells. The cell walls are not sharply outlined which would indicate destruction where a mastoid abscess can not be demonstrated." He was prescribed for symptomatically (empirin and codein gr.  $\frac{1}{4}$  for pain, phenobarbital for nervousness, ice bag or hot water bottle to the head) and plans were made for complete sinus x-ray the next day with especial emphasis on the sphenoids. However, five hours after admission the patient complained of sudden acute and severe pain in his head, nausea and vomiting, dyspnea, chill with fever 104.4 and he became irrational and unconscious. There was definite opisthotonus and it was assumed that he had a sudden and massive infection involving the C. N. S. He was given forty grains of sodium sulfapyridine per rectum immediately and three grains sodium luminal intramuscularly and six hours later was given thirty-five grains of sodium sulfapyridine per rectum.

On the second hospital day the temperature was 104.4; pulse 120; respiration 60; white cell count 43,500; polys 94%. Blood culture negative. Blood concentration of sodium sulfapyridine 1.3 Spinal fluid pressure 350 mm of water. Spinal fluid looked almost like pure pus and on direct examination and typing it was found to be pneumococcus type III.

At 9:00 a. m. he was given 500 c.c. normal saline intravenously and 50,000 type III antipneumococcus serum followed in a short while with 80 c. c. of a 5% sodium sulfapyridine solution also intravenously. At 3 p. m. he was given 500 c. c. 5% glucose intravenously followed by another 80 c. c. 5% sodium sulfapyridine solution and at 5:00 p. m. another 25,000 units of type III serum. At 11:00 p. m. he was given (in order) 500 c. c. 5% glucose, 80 c. c. of 5% solution of sodium sulfapyridine. His temperature dropped from 104.4 to 101 (rectal reading) but the pulse went to 140. During the twenty-four hours from midnight to midnight he was given 100,000 units of type III antipneumococcus serum, 95



grains of sodium sulfapyridine per rectum and 180 grains of sodium sulfapyridine in 5% solution intravenously.

On the third hospital day the white cell count was 44,900, 95% polys, 1 young, 7 staff, 85 segmented, 5 lymphs, 2 endos. Urinalysis showed no albumin, one to two red blood cells and leucocytes per high power. No sulfapyridine crystals. Blood concentration of sulfapyridine 13.6, spinal fluid concentration 6.25. Spinal fluid pressure 250. mm. Turbid 2 plus. Culture of fluid positive. Pulse around 120-140 all day. Temperature reached a high of 102.4 but dropped to 101 (all rectal readings). Respiration 30-50. During the 24 hours he was given a total of 170 grains of sodium sulfapyridine intravenously, 50,000 units type III serum intravenously in divided doses, 100 c. c. of citrated blood and 2,000 c. c. of 5% glucose and saline.

On the fourth hospital day the spinal fluid a little more clear. Culture of spinal fluid positive. Urine showed one plus albumin and 4-5 leucocytes per high power field. (Patient being catheterized every eight hours). Leucocytes 23,200, 90% polys, 23 staff, 67 segmented, 6 lymphs, 4 endos. Blood concentration of sulfapyridine 13.5. Temperature 101 all morning, 100.6 all afternoon and night. Respiration 30-40 all day. Pulse 90-110. During this 24 hours he received a total of 125 grains of sodium sulfapyridine intravenously, 50,000 units Type III antipneumococcic serum, 2,000 c. c. 5% glucose and saline intravenously, 100 c. c. citrated blood intravenously; and approximately 800 c. c. of orange juice, orange albumin and egg-nog (without whiskey) through the Levine tube which was started in the morning and left in for 8 hours. Patient still unconscious.

On the fifth hospital day the urine showed 1 plus albumin and 4-5 leucocytes and bacteria microscopically. Spinal fluid still clearer, culture of spinal fluid still positive, blood concentration of sulfapyridine 18.1. Leucocytes 20,600, 93% polys, 1 young, 7 staff, 85 segmented, 5 lymphs, 2 endos. During the morning and early afternoon he was given 90 grains of sodium sulfapyridine intravenously and 25,000 units Type III serum. Temperature 100.2 rectally, respiration 30. Pulse 90 during the morning. Feeling that the source of entry of the pneumococcus was through the right mastoid and that we could never effect a cure unless this source was eradicated, we decided that his general condition was such that this

was an opportune time to do a mastoidectomy. Patient was taken to the operating room and under pentothal sodium anesthesia intravenously the right mastoid was opened. There was definite cell-wall destruction throughout the mastoid tip. The intracranial route of infection was through a small opening about 2-3 mm. in length through the medial tegmen antri. There were no adhesions of the dura and the opening was enlarged to about 1cm. in diameter and packed with iodoform gauze. The bony plate over the lateral sinus was very soft and was removed intact and the sinus was thought to be free of any involvement. Patient was in the operating room less than an hour and returned to his room with temperature 102.8, pulse 130, and respiration 50. Intravenous glucose started in the operating room was followed with 500 c. c. normal saline and this with 200 c. c. citrated blood. At 11:30 this night he was given another 25,000 c. c. Type III serum and another 60 c. c. 5% sulfapyridine solution. Total serum today 50,000—total sodium sulfapyridine 180 grains.

On the sixth hospital day the urinalysis was negative. Blood sulfapyridine concentration 13.4. W. B. C. at 8:00 A. M. 16,600, 93% polys, 1 young, 7 staff, 85 segmented, 5 lymphs, 2 endos. Spinal fluid clearer, though still turbid 1 plus, culture positive. Because of the drop in the white cell count this was checked again in the afternoon and was as follows: W. B. C. 10,600, 90% polys, 3 young, 7 staff, 80 segmented, 4 lymphs, 4 endos, 2 eosinophils. Temperature reached a high of 103.6 but dropped to 101.8 in the afternoon. 60c. c. 5% sodium sulfapyridine solution was given intravenously in the morning before the blood count was taken but no more was given for the rest of the day. 50,000 units of the serum was given with 500 c. c. normal saline and 500 c. c. 5% glucose, but adequate amounts of orange juice, water, orange albumin and egg-nog were given through the Levine tube. Total serum 50,000 units, total sodium sulfapyridine 45 grains.

On the seventh hospital day the urinalysis showed 1 plus albumin, 3-5 red cells and leucocytes per high power field leucocytes 15,200, 89% polys, 1 young, 6 staff, 82 segmented, 9 lymphs and 2 endos. Blood sulfapyridine concentration 6.6. For the ensuing 24 hours he was given a total of 112.5 grains sodium sulfapyridine in 5% solution intravenously divided into 3 equal doses, and a total of 50,000 units Type III serum divided into 2 equal doses. He was given 100 c. c. citrated blood intravenously

through the Levine tube he was given adequate amounts of water, orange juice, orange albumin and eggnog and was given gtt's XXX Armours yellow bone marrow extract at 4 hour intervals for 4 doses. He was also given 1 c. c. Lilly's reticulogen intramuscularly. Temperature had its high of 103.6 in the morning and dropped to 101.4 in the afternoon. Pulse averaged about 110 and respiration about 30. Patient still unconscious.

On the eighth hospital day urinalysis negative save for 1 R. B. C. and 5 W. B. C. per H. P. F. White B. C. 14,800, 83% polys, 1 young, 7 staff, 80 segmented, 14 lymph, 2 endos. Spinal fluid barely cloudy. Pressure 1 plus. Culture of spinal fluid still positive. Blood concentration of sulfapyridine 11.2. Spinal fluid concentration 5.2. For this 24 hours he was given a total of 112½ grains of sodium sulfapyridine intravenously and 50,000 of Type III serum as well as 100 c. c. citrated blood. Temperature leveled off at 100.2, pulse 88 and respiration 28. He was given adequate liquid diet through the Levine tube until late in the afternoon when he "came to" for the first time. He seemed to be perfectly rational though quite confused as to why he was in the hospital. He asked for water and drank it through a straw, so the Levine tube was discontinued and he was started on orange juice, orange albumin and eggnog by mouth. He was given 1 c. c. reticulogen intramuscularly and gtt's, XC Armours yellow bone marrow extract in divided doses. General condition much improved.

On the ninth hospital day urinalysis showed 1 plus albumin and 5-8 leucocyte per high power field. White B. C. 30,900, 69% polys, 2 young, 17 staff, 50 segmented, 12 lymphs, 10 endos and 3 eosinophils. There were numerous nucleated R. B. C. Spinal fluid was clear and culture was negative. Spinal fluid concentration of sulfapyridine 4.6. Blood concentration 13. Temperature normal all day. Pulse 84, respiration 24. He was given a total of 112.5 grains of sodium sulfapyridine intravenously and 50,000 units of serum in 2 doses. After the second dose of serum he vomited but showed no other reaction. He was given a liquid and soft diet which he accepted voraciously. The packing was removed from the mastoid and the wound seemed to be in excellent condition.

The tenth hospital day the urinalysis showed 1 plus albumin, 4-8 white per H. P. F. Blood concentration of sulfapyridine 3.8 (afternoon rather than A. M.) W. B. C. 44,000, 61% polys, 3 young, 16 staff, 42 segmented, 13 lymphs, 14 monos, 5 eosin.

Many normoblasts. Culture of spinal fluid drawn the day before still negative. Patient cooperating fully. Temperature 99 (oral) pulse 84, resp. 26. Sodium sulfapyridine for 24 hours 100 grains, 25,000 units Type III serum given this morning but shortly afterwards patient complained of severe backache followed by hives and swelling of both hands so serum has been ordered discontinued. Patient has taken adequate amounts of food and fluids by mouth. Dressing on the mastoid shows practically no drainage. In view of the marked response of the blood count to yellow bone marrow extract the dose has been lowered to 15 drops B. I. D. but the reticulogen has been continued at 1 c. c. intramuscularly.

On the eleventh hospital day the hemoglobin was 87.6, the red cell count was 4,480,000, Index 0.9, leucocytes was 24,200, 78% polys, 3 young, 18 staff, 57 segmented, 14 lymphs, 3 endos. 1 eosinophile. Blood concentration sulfapyridine 4.6. Temperature, pulse, respiration all normal. Total sulfapyridine intravenously 112.5 grains. Patient seems normal.

On the twelfth hospital day the blood sulfapyridine concentration 4.0 hemoglobin 81%, red cell count was 4,220,000, leucocytes 22,600, 1 young, 6 staff, 27 lymphs. 10 monos, 1 eosinophil. Urinalysis shows 15 leucocytes per high power field, trace of albumin. Temperature, pulse and respiration normal.

From here on his progress was steady. On his fourteenth hospital day all sodium sulfapyridine was discontinued but yellow bone marrow extract and reticulogen were continued until the 21st hospital day. Arthritis occurred on the 28th hospital day and this was followed by hives, so it was decided that it was a delayed reaction from the serum as both cleared up spontaneously within two days. Patient was dismissed from the hospital 31 days after admission, able to walk and complaining only of weakness and diplopia. The diplopia has gradually cleared so that now the patient complains of it only when looking through the lower part of his eyes. X-rays of the urinary tract show no calcifications and urinalyses are normal. Patient is back at work and weighs a little over 160 pounds, a gain of 25 pounds since the onset of his illness.

In the first 10 days of his illness he received a total of 475,000 units of Type III antipneumococcus serum, and in the first 2 weeks of his illness he received a total of 1452.5 grains of sodium sulfapyridine intravenously and 95 grains per rectum—a grand total of 1547.5 grains of sodium sulfapyridine.



# Kentucky Medical Journal

Published Monthly By  
THE KENTUCKY MEDICAL ASSOCIATION  
Incorporated

Entered as second class matter October 22, 1906, at the Postoffice at Bowling Green, Ky., under act of Congress, March 8, 1879.

Subscription Price .....\$5.00  
Edited Under the Supervision of the Council

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NEXT MEETING LOUISVILLE  
SEPTEMBER 29—OCTOBER 3, 1941

## COUNTY SOCIETY REPORTS

**Campbell-Kenton:** A called meeting of the Campbell-Kenton County Medical Society was called to order by the President at 9 p. m., May 22nd, at St. Elizabeth Hospital with twenty or more members present.

H. C. White presented a resolution of the Kenton County Anti Tuberculosis League, requesting the indorsement of the Medical Society for their plan of accepting the offer of the State Health Department to furnish a Tuberculosis Case Finding Unit to Kenton County. Dr. White explained that certain groups probably would be dealt with, namely: contact cases, particularly families of those with Tuberculosis, expectant mothers, food handlers, domestic help, and certain industrial workers. After preliminary work, such as tuberculin test done by the Anti Tuberculosis League, the unit would take flat plates of positive reactors. Dr. White in answering the questions emphasized the fact that one important aspect of this plan was the collection of statistics as a basis for demanding legislations and appropriations for the care of the tuberculous.

O. M. Goodloe, Assistant Director of the Bureau of County Health Work, further explained the operation of the Case Finding Units. Discussion of the matter involved also a plan of the Medical Economics Committee of the State Medical Society for Aid to the Tubercular Indigent.

A motion was made by Dr. White that the Society endorse the plan and the motion was carried. Dr. Mersch and Dr. Schwertman were appointed as a committee to co-operate with the K. C. A. T. L.

Dr. Goodloe presented for the National Youth Association the subject of examining youths in that organization, asking the Society to recommend a plan for carrying out these examinations in Kenton and Campbell Counties. He reported the rate of remuneration for such examinations, if done on a remunerative basis, as \$1.50 per hour. After considerable discussion, Dr. Mersch made a motion that the Society is opposed to certain plans for examining youths under the N. Y. A. as leading towards State Medicine and recommends that the examinations be done by a full time paid examiner. This motion was seconded by Dr. Krieger and was passed.

Dr. Eith for the annual picnic committee reported that it would be impossible to obtain the Highland Country Club for Thursday, June 5th. It was voted to change the date of the meeting to Wednesday, June 4th.

The meeting was adjourned at 10:45 p. m. The annual picnic meeting of the Campbell-Kenton County Medical Society was held at

the Highland Country Club on June 4th, 1941. Following an afternoon of golf and other sports in which many of the members participated, a delicious dinner was served in the club house at 6 p. m. A large portion of the members was present.

Two items of business were acted upon at this meeting: A resolution was passed, condemning the paragraph K, Section 15 of the proposed Food, Drug and Cosmetic Law for the State of Kentucky; which law would embody unnecessary and unwarranted detail work on the physicians in prescribing and dispensing certain drugs, such as the sulfanamides and barbiturates and recommending that in its stead a law be adopted embodying the features of the present Federal Food and Drug Law concerning prescribing and dispensing of such drugs.

A resolution was unanimously passed endorsing the candidacy of Dr. Luther Bach for President of the Kentucky State Medical Association.

The next regular meeting will be held at St. Elizabeth Hospital on September 4th, 1941.

W. V. PIERCE, Secretary

**The Four-County Medical Society:** The Four County Medical Society met in quarterly session on Tuesday night, May 27, in Marion, Crittenden county, and following supper at the Methodist church with the Rev. H. H. Jones, pastor of the church, offering thanks, the president, W. C. Haydon called the meeting to order and T. Atcheson Frazer extended appropriate welcome to the thirty-five persons in attendance. Minutes of the previous meeting which was held in Princeton on February 27, were read and approved and several communications were read by the secretary, including an announcement of a welfare program, sponsored by the Metropolitan Life Insurance Company with particular reference to diabetes in which the co-operation of physicians was desired, also a card from the family of the late Austin Bell, expressing appreciation for the flowers, sent in the name of the Society, and one from the Committee on Medical Economics of the State Medical Association, relating to health examinations of NYA employees, which evoked some discussion.

The privileges of membership were extended to dentists and the following were admitted as members of the Society upon the payment of the annual membership fees: C. O. Akin, C. H. Jagers, Power Wolfe, all of Princeton. The following physicians paid annual membership fees: J. M. Dishman, B. K. Amos, both of Princeton; L. A. Crosby, Cadiz; Paul L. White, Bumpuss Mills, Tenn. The secretary reported K. L. Barnes, Princeton, as having paid annual membership fees since the last meeting of the Society. It was decided to hold the next quar-

terly meeting of the Society at Kuttawa, Lyon county, on the fourth Tuesday in August, 1941, with C. P. Moseley, Eddyville, in charge of arrangements. J. O. Nall, Crittenden county Health Officer, urged co-operation in the holding of a child clinic some time during the summer, probably at Princeton under the supervision of Philip A. Barbour, Louisville.

W. C. Haydon, the president, requested J. O. Nall, who in co-operation with B. L. Keeney, dentist, Princeton, had arranged the program, to take charge, and he presented George L. Seeman, dentist, Nashville, who discussed "Diseases of the Mouth" with lantern slide illustrations. J. O. Nall then presented Mell L. Welborn, of Evansville, who discussed "Important Issues in Diagnosis" with lantern slide illustrations. A general discussion of the papers followed and valuable points were elicited.

In addition to Dr. Seeman, of Nashville, the following other dentists were in attendance: B. L. Keeney, C. O. Akin, Power Wolfe, C. H. Jagers, Princeton; A. H. Ellis, Providence; E. N. Gardner, P. J. Frazer, Marion. In addition to M. L. Welborn, of Evansville, the following other physicians were in attendance: J. O. Nall, T. Atcheson Frazer, Marion; E. N. Futrell, L. A. Crosby, John Futrell, Cadiz; John L. Cassidy, John Combs, Evansville; Harry Jones, Nashville; J. G. White, G. E. Hatcher, Cerulean; Paul L. White, Bumpuss, Mills, Tenn.; T. L. Phillips, Kuttawa; E. L. Kennedy, Burna; D. J. Travis, C. P. Moseley, Eddyville; D. M. Sloan, G. B. Carr, Sturgis; A. B. Colley, Dixon; Bruce Underwood, Morganfield; W. C. Haydon, J. M. Dishman, B. K. Amos, W. L. Cash, Princeton; also Rev. H. H. Jones, pastor of Methodist church, Marion; Ted Frazer, Marion druggist; Dorothy L. Grese, technician, Welborn-Walker Hospital, Evansville.

W. L. CASH, Secretary

**Floyd:** The doctors of Floyd County assembled in the Beaver Valley Hospital, Martin, Saturday, May 10, 1941 for the purpose of reorganizing the county medical society.

W. L. Stumbo, Martin, presided as temporary chairman. The following officers were elected. E. R. Cadden, Martin, president; John Sizemore, Lacey, vice-president; Robert Sirkle, Weeksbury, Secretary-Treasurer.

A brief discussion on the fundamental functions of the reorganized association was given by our councilor, Proctor Sparks, Ashland. Following this discussion a very interesting and enlightening paper was read by Thornton Scott, Lexington. Dinner was then served in the main dining room.

The meeting was again called to order and a paper on Diarrhea was given by R. B. Warfield, Lexington, which was enjoyed by everyone.



The meeting was adjourned to reconvene June 7, 1941.

The following Floyd County and visiting doctors in attendance were: M. V. Wickers, Wayland; W. L. Stumbo, and E. R. Cadden, Martin; O. E. Johnson, Drift; John Sizemore, M. M. Collins, and C. R. Masser, Lackey; Robert Sirkle, Weeksbury; Paul Hall, J. A. Wells, R. D. Johnson and W. E. Adkin, Paintsville; M. F. Kelly, Hindman; M. T. Dodson and Marvin Ransdell, Prestonburg; Proctor Sparks, Ashland; Thornton Scott and R. B. Warfield, Lexington.

ROBERT M. SIRKLE, Secretary.

**Jefferson:** The 829 stated meeting of the Jefferson County Medical Society was held Monday evening, May 19 with 152 members and guests present.

B. W. Smock asked Misch Casper to discuss recent developments for a meeting place for the June picnic meeting.

M. Casper said the committee on meeting places had found five possibilities, the best being South Park and Leiter's Park, the latter being preferable.

It was moved and seconded that the committee approve the place. Motion passed.

The President called the meeting to order at 8:10 p. m.

I. A. Arnold made a motion that the business meeting be dispensed with. Seconded by J. B. Lukins. Motion passed.

M. Casper made a motion that the Army officers, although not members of the Society, be extended the privileges of the floor. Seconded and passed. The scientific program began at 8:15 p. m.

Surgical Problems of Army Service. C. D. Holmes, Lieutenant Colonel, Medical Corps, Surgeon, Fort Knox.

Prevention and Treatment of Acute Respiratory Disease at Fort Knox, Winter of 1940-41. Alvin J. Bayley, M. D., Lieutenant Colonel, Chief of Medical Service, Fort Knox.

Medical Phases of Selective Service. William N. Lipscomb, M. D., Major, Medical Corps, State Medical Officer.

Aviation Medicine. G. W. Neece, M. D., Captain, Medical Corps, Flight Surgeon, Patterson Field, Fairfield, Ohio.

W. N. Lipscomb invited discussion or criticism of his paper. John D. Campbell spoke briefly concerning current interest in the psychiatric phase.

A. Clayton McCarty made a motion that, in addition to a rising vote of thanks the guest speakers be made honorary members of the Society. Seconded and passed. The Society adjourned.

W. B. SMOCK, Secretary.

**Hopkins:** The Hopkins County Medical Society held its regular meeting at 7 p. m., May 8th. Guests of the society were Dr. T. J. Talbert and Mr. Raymond Dixon, Outwood, and Dr. Irvine Bensman, Owensboro.

Dr. Bensman addressed the society on the subject: "Kidney Infections Excepting Tuberculosis," and Dr. C. R. Morton spoke on "Control of Tuberculosis."

There was a short discussion of the work done by the National Physicians' Committee for the Extension of Medical Service. Dr. Finley moved and the motion passed that the society go on record as opposing any further socialization of medicine, and that it support appropriate measures to combat this. The secretary was directed to write the AMA for an opinion concerning the work of the N. P. C.

The next regular meeting of the society will be held June 12. Announcement was made of the proposed District Meeting to be held in Owensboro.

Those in attendance were Drs. Haynes, Garnier, T. R. Finley, A. F. Finley, Morton, Stucky, Morse, Veal, Corum, Foshee, Johnson, and the guests.

W. H. GARNIER, Secretary.

**Hopkins:** The Hopkins County Medical Society held its regular monthly meeting at the hospital with Drs. Haynes, Scott, Garnier, Foshee, Veal, Finley, Townes, Corum and Stucky in attendance.

The program consisted of a splendid discussion by Dr. Foshee of some rare surgical conditions.

WM. H. GARNIER, Secretary.

**Madison:** The regular meeting of the Madison County Medical Society was held at the U. S. Trachoma Hospital Thursday evening, May 15, at 7:30 p. m.

Wilson Dodd presided with the following members present: Drs. R. M. Phelps, J. A. Mahaffey, Robert Sory, W. F. Dodd, J. D. Harris, Ruby H. Paine, Kenneth W. Wright, Max E. Blue, Hugh Mahaffey, J. C. Baker, J. W. Armstrong, J. B. Floyd, and Robert L. Rice. Visitors were: Drs. Charles A. Vance and Jefferson Overstreet of Lexington.

The meeting was called to order by the president and the minutes of the previous meeting were read and approved.

Wilson Dodd reported that the June meeting will be held at Berea on Thursday the 19th. Temporary arrangements are to have the meeting at Boone Tavern.

New Business: Communications were read by the secretary.

Scientific Session: J. C. Baker and Robert L. Rice gave short discussions on outstanding ar-

ticles in the last two issues of the A. M. A. Robert Sory gave a very interesting paper on Trachoma with a particular reference to his own work in this field.

Meeting adjourned at 9:00 p. m.

Drs. Shelby G. Carr, O. F. Hume, John H. Rutledge, J. D. Farris, Robert Sory, Hugh Mahaffey, J. A. Mahaffey, Robert H. Cowley, John W. Armstrong, J. C. Baker, and Robert L. Rice attended the dinner meeting of the Fayette County Medical Society Tuesday evening, May 13.

ROBERT L. RICE, Secretary.

**McCracken:** The McCracken County Medical Society held a regular monthly dinner meeting at the Ritz Hotel, Wednesday, April 23, 1941 at Paducah.

There were twenty-one members and twenty-five guests present, Ewing Dunn, the President, presiding.

R. W. Robertson announced the prospective program for the Southwestern Kentucky meeting at Paducah, May 13th.

The scientific program consisted of talks by Julius Jensen, associate professor of medicine at the Washington University of St. Louis, subject "Heart Disease in Pregnancy" and Malone Stroud, also associate professor of medicine at the Washington University, St. Louis, subject "Newer Aspects of the Differential Diagnosis of Asthma."

Both papers were well received and discussed.

LEON HIGDON, Secretary

**Union:** G. B. Underwood of Evansville, addressed the Union County Medical Society June 3rd. The society met at the Kentucky Hotel at 6 p. m. and the evening meal was followed by a discussion on the subject of Eczema. Dr. G. B. Underwood is a specialist in the field of skin diseases and discussed the diagnosis of Eczema by the use of the patch test. This consists of placing the suspicious agent on the skin of the person in order to determine what substance is the offending agent.

The paper was discussed by all the doctors present and a very enjoyable meeting was held.

It was voted to extend membership in the society to all dentists in the county and the dues for such membership were fixed.

BRUCE UNDERWOOD, Secretary

**Warren-Edmonson:** The Warren-Edmonson Medical Society held its regular monthly meeting in Bowling Green, on Wednesday evening, April 16, 1941. After the dinner A. B. Loveman, Louisville, showed about 200 slides accompanied by a discussion of Common Dermatological Conditions of Interest to General Practitioners. Dr. Loveman's clinical acumen was sur-

passed only by his skill as a photographer and the detail he achieved in the pictures was really remarkable. This was followed by a most interesting and instructional paper by Edwin P. Solomon, Louisville on Non-Operative Gynecological Conditions of Interest to the General Practitioner. A general round table discussion of these papers was conducted by all present.

W. O. CARSON, Secretary.

#### NEWS ITEMS

Dr. L. O. Toomey, Bowling Green, has been named NYA medical examiner for Bowling Green and Warren County according to announcement made by William A. Stroud, district NYA supervisor.

The well-known pharmaceutical manufacturing house of G. D. Searle & Co., Chicago, announces that work has been started on the building of their new laboratories and plant, which are located on the outskirts of Chicago, in the Skokie district. With the completion of this building, this company will have one of the most complete and modern pharmaceutical laboratories in the country, and the physicians of Kentucky are invited to visit this plant on its completion, when in Chicago.

Dr. Elwood Wand, Woodbury, died May 14th, of cerebral embolus. He was born in Woodbury August 22, 1856, attended local schools and educated at the Old Louisville School of Medicine 1882 and 1883. He graduated from Vanderbilt University March 1, 1886 and entered into the practice of medicine at Woodbury and delivered his first case fifty years ago.

The American College of Physicians announces its twenty-sixth annual session to be held in St. Paul, Minnesota, April 20-24, 1942.

Dr. Roger I. Lee, of Boston, is President of the College, and will be in charge of the program of General Sessions and Lectures. Dr. John A. Lepak, of St. Paul, has been appointed General Chairman, and will be in charge of the program of Hospital Clinics and Round Table Discussions, as well as local arrangements, entertainments, etc. Mr. Edward R. Loveland, Executive Secretary of the College, 4200 Pine Street, Philadelphia, will have charge of the general management of the session and the technical exhibits.

Dr. John D. Allen, Jr. who was graduated recently from the Harvard Medical School is spending a month with Dr. and Mrs. John D. Allen, Louisville. He will be an intern at the Cincinnati General Hospital.





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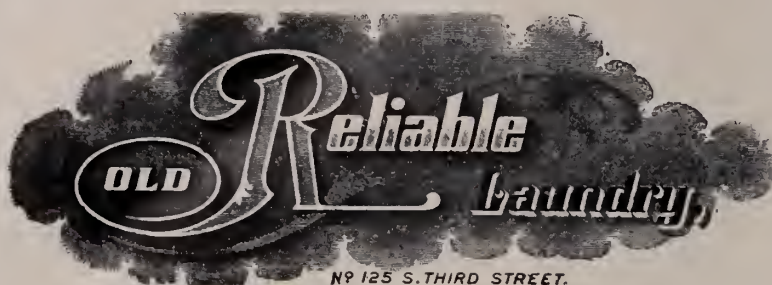
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BOWLING GREEN, KY.

AUGUST, 1941

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph., Gon. & Ven. Dis.*, 23, 201 (March), 1939.

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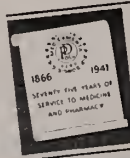
We're thinking now of the man who permits himself . . . and his family . . . to run risks which no soldier is allowed to take. We're thinking of the man who says, "If I don't feel

better tomorrow, I'll see the doctor." But will he? And when he does, will it be too late? Too late to prevent a serious illness, or too late to gain the advantage of time in treating a disease already contracted.

So why not establish the "Sick Call" system in your household? Stomach ache, you know, is sometimes the first warning of appendicitis; a sore throat may be the forerunner of a condition which requires expert attention. When you, or any of your family, develop even a seemingly minor ailment, don't waste time which may be precious.

Call your doctor, and let him decide whether or not the ailment is trivial—and what should be done about it. He knows—you don't. Report for "Sick Call" promptly

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## CALENDAR OF COUNTY SOCIETY MEETINGS

COUNTY	SECRETARY	RESIDENCE	DATE
Adair.....	Todd Jefferies .....	Columbia .....	August 6
Allen.....	A. O. Miller.....	Scottsville .....	August 27
Anderson.....	J. B. Lyen.....	Lawrenceburg .....	August 4
Ballard.....	F. H. Russell.....	Wickliffe .....	
Barren.....	R. E. Hayes.....	Glasgow .....	August 20
Bath.....	H. S. Gilmore.....	Owingsville .....	August 11
Bell.....	Edward S. Wilson.....	Pineville .....	August 8
Boone.....	R. E. Ryle .....	Walton .....	August 20
Bourbon.....	B. N. Pittenger.....	Paris .....	August 21
Boyd.....	R. H. Gardner.....	Ashland .....	August 5
Boyle.....	P. C. Sanders.....	Danville .....	August 19
Bracken-Pendleton.....	W. A. McKenney.....	Falmouth.....	August 28
Breathitt.....			August 19
Breckinridge.....	John E. Kincheloe .....	Hardinsburg .....	
Bullitt.....	George B. Hill.....	Mt. Washington .....	
Buader.....	D. G. Miller, Jr.....	Morgantown.....	August 6
Caldwell.....	W. L. Cash.....	Princeton .....	August 5
Calloway.....	J. A. Outland.....	Murray .....	August 7
Campbell-Kenton.....	W. V. Pierce.....	Covington .....	
Carlisle.....	E. E. Smith.....	Bardwell .....	August 5
Carroll.....	H. Carl Boylen.....	Carrollton .....	
Carter.....	Don E. Wilder.....	Grayson .....	August 12
Casey.....	Wm. J. Sweeney.....	Liberty .....	August 28
Christian.....	Geo. E. Pryor.....	Hopkinsville .....	August 19
Clark.....	Robert E. Strode.....	Winchester .....	August 15
Clay.....	L. H. Wagers.....	Manchester.....	August 12
Clinton.....	S. F. Stephenson.....	Albany .....	August 16
Crittenden.....	C. G. Moreland.....	Marion .....	August 11
Cumberland.....	W. Fayette Owsley.....	Burkesville .....	August 6
Daviess.....	T. H. Milton.....	Owensboro .....	August 12 & 26
Elliott.....	W. H. Joyner (Acting).....	Sandy Hook .....	
Estill.....	Virginia Wallace.....	Irvine .....	August 13
Fayette.....	Douglas E. Scott.....	Lexington .....	August 12
Fleming.....	Roy Orsborn.....	Flemingsburg .....	August 13
Floyd.....	Robert M. Sirkle.....	Weeksbury .....	August 27
Franklin.....	Thomas P. Leonard.....	Frankfort .....	August 7
Fulton.....	M. W. Haws.....	Fulton .....	August 13
Gallatin.....			August 21
Garrard.....	J. E. Edwards.....	Lancaster .....	August 21
Grant.....	Lenore Patrick.....	Williamstown .....	August 20
Graves.....	H. H. Hunt.....	Mayfield .....	August 5
Grayson.....			
Green.....	S. J. Simmons.....	Greensburg.....	August 4
Greenup.....	L. C. Bate.....	Greenup.....	August 8
Hancock.....	F. M. Griffin.....	Hawesville .....	August 4
Hardin.....	D. E. McClure.....	Elizabethtown .....	August 14
Harlan.....	M. W. Howard.....	Harlan .....	August 16
Harrison.....	W. B. Moore.....	Cynthiana .....	August 4
Hart.....	Maher Speevack.....	Munfordville .....	August 5
Henderson.....	J. Leland Tanner.....	Henderson .....	August 11 & 25
Henry.....	Owen Carroll.....	New Castle.....	August 14
Hickman.....	H. E. Titworth .....	Clinton .....	August 7
Hopkins.....	Wm. H. Garnier.....	Madisonville .....	August 14
Jackson.....			August 2
Jefferson.....	B. W. Smock.....	Louisville .....	
Jessamine.....	J. A. VanArsdall.....	Nicholasville.....	August 21
Johnson.....	A. D. Slone.....	Paintsville .....	August 25
Knott.....			August 23
Knox.....	T. R. Davies.....	Barbourville.....	August 21
Larue.....			August 5
Laurel.....	Oscar D. Brock .....	London .....	August 13
Lawrence.....	L. S. Hayes.....	Louisa .....	August 18
Lee.....	A. B. Hoskins.....	Beattyville .....	August 9
Leslie.....	John H. Kooser.....	Hyden .....	
Letcher.....	F. D. Willey.....	Jenkins .....	August 26
Lewis.....			August 18
Lincoln.....	Lewis J. Jones.....	Hustonville.....	August 15
Livingston.....			
Logan.....	E. M. Thompson.....	Russellville .....	
Lyon.....	H. H. Woodson.....	Eddyville .....	August 5
McCracken.....	Leon Higdon.....	Paducah .....	August 27
McCreary.....	R. M. Smith.....	Stearns.....	August 4
McLean.....	Allen R. Will.....	Calhoun .....	August 14
Madison.....	Robert L. Rice.....	Richmond .....	August 21
Magoffin.....			
Marion.....	W. E. Oldham.....	Lebanon .....	August 26
Marshall.....	S. L. Henson.....	Benton .....	August 20

COUNTY	SECRETARY	RESIDENCE	DATE
Mason.....	C. W. Christine.....	Maysville.....	August 13
Meade.....	S. H. Stith.....	Brandenburg.....	August 28
Menifee.....	E. T. Riley.....	Frenchburg.....	
Mercer.....	J. Tom Price.....	Harrodsburg.....	August 12
Metcalfe.....	E. S. Dunham.....	Edmonton.....	August 5
Monroe.....	George E. Bushong.....	Tompkinsville.....	
Montgomery.....	D. H. Bush.....	Mt. Sterling.....	August 12
Morgan.....			
Muhlenberg.....	E. L. Gates.....	Greenville.....	August 12
Nelson.....	R. H. Greenwell.....	Bardstown.....	
Nicholas.....	T. P. Scott.....	Carlisle.....	August 18
Ohio.....	Oscar Allen.....	McHenry.....	August 6
Oldham.....			August 5
Owen.....	K. S. McBee.....	Owenton.....	August 7
Owsley.....	W. H. Gibson.....	Booneville.....	August 4
Perry.....	Lewis C. Coleman.....	Hazard.....	August 11
Pike.....	F. H. Hodges.....	Pikeville.....	August 5
Powell.....	I. W. Johnson.....	Stanton.....	August 4
Pulaski.....	M. C. Spradlin.....	Somerset.....	August 14
Robertson.....			
Rockcastle.....	Lee Chestnut.....	Mt. Vernon.....	August 1
Rowan.....	A. W. Adkins.....	Morehead.....	August 11
Russell.....	J. R. Popplewell.....	Jamestown.....	August 11
Scott.....	A. Y. Covington.....	Georgetown.....	August 7
Shelby.....	A. D. Doak.....	Shelbyville.....	August 21
Simpson.....	L. R. Wilson.....	Franklin.....	August 12
Spencer.....			
Taylor.....	W. B. Atkinson.....	Campbellsville.....	August 7
Todd.....	B. E. Boone, Jr.....	Elkton.....	August 6
Trigg.....	N. C. Magraw.....	Cadiz.....	
Trimble.....			
Union.....	Bruce Underwood.....	Morganfield.....	August 5
Warren-Edmonson.....	W. O. Carson.....	Bowling Green.....	August 13
Washington.....	J. H. Hopper.....	Willisburg.....	August 20
Wayne.....	Frank L. Duncan.....	Monticello.....	
Webster.....	C. M. Smith.....	Dixon.....	August 29
Whitley.....	C. A. Moss.....	Williamsburg.....	
Wolfe.....			August 4
Woodford.....	Geo. H. Gregory.....	Versailles.....	August 7

ALCOHOLISM  
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DRUG ADDICTION

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Established 1904

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AND  
MENTAL DISEASES



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Our ALCOHOLIC treatment destroys the craving, restores the appetite and sleep, and rebuilds the physical and nervous condition of the patient. Liquors withdrawn gradually; no limit on the amount necessary to prevent or relieve delirium.

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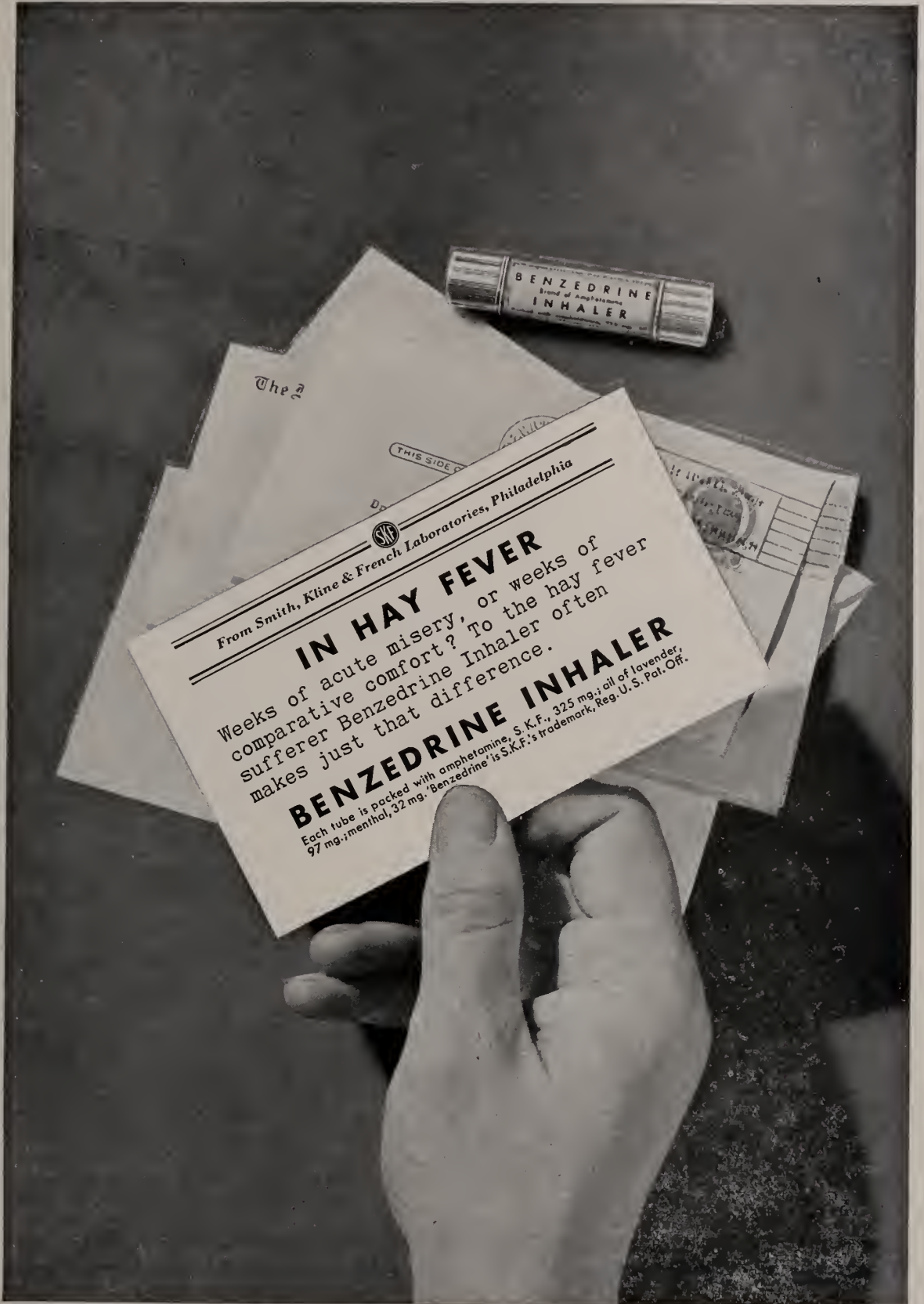
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# KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

VOL. 39, No. 8

BOWLING GREEN, KY.

AUGUST, 1941

## PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION

The American Medical Association advocates:

1. The establishment of an agency of federal government under which shall be coordinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American System of democracy.

## EDITORIALS

## PREMARITAL LAW IN OHIO

Ohio has joined the increasing number of states seeking to reduce syphilis by requiring all applicants for marriage licenses to pass a physical examination. This law goes into effect August. Tennessee, our border-line state's Premartial Law became effective July 1. The following states now have the Premarital Law: Alabama, California, Colorado, Connecticut, Illinois, Indiana, Iowa, Kentucky, Louisiana, Michigan, North Carolina, North Dakota, Oregon, Pennsylvania, New Hampshire, New Jersey, New York, Rhode Island, South Dakota, Virginia, West Virginia, Wisconsin and Wyoming, and as rapidly as the legislatures convene more will be added to the roster.

Since the law went into effect in Kentucky, January 1, 1941 up to and including May 1941, there have been 18,416 Premarital tests made of which 361 were positive, and 17,616 negative, with 54 doubtful and 385 unsatisfactory specimens. The amount of positives is 1.96% which is the usual positive rate found in the general population. However, many of these applicants were unaware of the disease until the blood test was made for marriage. The 385 unsatisfactory specimens mean some were hemolyzed, broken or insufficient in quantity and those that could not be identified having no doctor's name or means of identification on the history slips. This is an unnecessary labor for both the doctor and the laboratory and can be prevented by careful attention in drawing the specimens, properly labeling them and completing the history cards.

The State Laboratory examines over 1,500 specimens a day for the Kahn test for syphilis and each of these specimens are codified, alphabetized and filed by county, physician and health officer before the reports are mailed which necessarily takes some time. This is no hardship on the doctor or the patient because syphilis is not an acute disease nor is the public welfare endangered as it is in diphtheria or scarlet fever where early reports are essential. If there is necessity for haste the private laboratories can give a report in a very short time and we are requesting the physicians to avail themselves, as much as possible, of the opportunity offered by the private laboratories.

## DR. GIBNEY

In this issue of the JOURNAL our readers will find an extremely interesting sketch of the life of Dr. Virgil P. Gibney. Dr. Gibney was a Kentuckian as was his preceptor and predecessor in the development of the field of Orthopedic Surgery, Dr. Sayre. Dr. Gibney was an honorary life member of the Kentucky State Medical Association and delivered a notable address at the session held in Bowling Green in 1910.

While Dr. Gibney spent most of his life in New York, he was a typical Kentuckian. He was truly a great surgeon and a remarkable practitioner of medicine.

Dr. Gibney was an uncle of Dr. C. A. Vance, of Lexington, Kentucky, who is the Chairman of the Council of this Association.

## MAKE YOUR RESERVATIONS EARLY

Dr. A. R. Bizot, Chairman of the Hotel Committee, requests physicians to make their reservations for the Annual Meeting as early as possible. Ample accommodations may be secured for all physicians and their families if reservations are made in time. Headquarters will be at the Brown Hotel. Other splendid hotels are within the radius of two blocks: Henry Clay, Seelbach, Watterson and Kentucky. Reservations may be made by writing to the Chairman of the Hotel Committee or directly to the hotel.

The meeting this year promises to be one of the most interesting and instructive ever held by the Association.

## PROGRAM OF THE PEDIATRIC MEETING

Dr. Philip F. Barbour, Chairman of the Pediatric Group, invites all the members of the Association who are interested in diseases of children to attend the meeting of the Pediatric Group on Monday, September 28, 1941 at 10 A. M. in the Louis XVI Room, Brown Hotel. The program will be as follows:

- 10:00 A. M.—Neurological Complications of Measles—Margaret Limper, M. D. Louisville.
- 10:30 A. M.—Vitamin "K" in the Newborn—Robert Warfield, M. D. Louisville.
- 11:00 A. M.—Pneumococcic Peritonitis—Robert Blitz, M. D. Louisville.
- 11:30 A. M.—Skin Conditions in Children (Slides)—Winston Rutledge, M. D. Louisville.



2-3 P. M.—Clinic (Children's Free Hospital)—J. Keller Mack, M. D. Louisville.

3-4 P. M.—Round Table—Blood Dyscrasias—(Children's Free Hospital)—Harry S. Andrews, M. D. Chairman, Louisville, Thomas Parks, M. D. Lexington, Marion Beard, M. D. Louisville.

One of the interesting features of this meeting will be the clinic that will be held at the Children's Free Hospital which will include round table discussions and clinics. For further information write to Lee Palmer, M. D. Secretary, Louisville.

### THE OBSTETRICAL PROGRAM

One of the most valuable features of the program at the annual meeting at the Brown Hotel, September 29-October 3rd, will be the round-table discussion in various branches of medicine. This year the Obstetrical Program promises to be the best in the history of the association.

Doctor W. P. McConnell, Chairman of this part of the program, will welcome any suggestions or topics for discussion, and it will be particularly valuable to him to have these questions sent to him as early as possible. This round-table discussion is for the general practitioner to aid him in difficult obstetrical cases.

### HOBBY LOBBY

Every physician realizes the value of a hobby, and, in this regard, physicians practice what they preach. Those who recall the splendid exhibit of doctors' hobbies at the Lexington Meeting will be glad to know that Dr. Jesshill Love, Louisville, has again been appointed chairman of the committee for handling this subject. The hobby exhibit last year was most interesting and instructive, and it is hoped that every physician will contribute to making it more so this year. Write to Dr. Jesshill Love at once and reserve space for your hobby.

### PLEASURES DURING THE ANNUAL MEETING

The time of the annual meeting, September 29 to October 3rd, is one of the loveliest periods of the year in Louisville. The recreation centers have passed their summer activities and the quiet lull of autumn has begun. There are many beautiful golf courses such as the Louisville Country Club and the Audubon Country Club for the sporting members. There

are the Municipal and Big Springs Clubs for those who love golf for its pleasure alone.

We have many indoor swimming pools and gymnasiums to restore the tired muscles and skating rinks for the younger members of the family. There are many short tours and delightful places for luncheons and dinners. Fort Knox is only about an hour's ride from Louisville, and gives the visiting physicians and their families an opportunity to see the mechanized devices of the new phases of our modern war, and also a glimpse of the famous gold vault.

For those of the sober and classical mind, there is the University of Louisville and its interesting library and the musical rooms where all the operas and famous pieces of music can be heard by transcription.

A visit to the hospitals will show the latest technique in laboratory procedures, blood banks, and all types of equipment that the doctors will use in their armamentarium. This time of year is ideal for an instructive vacation.

### MANAGEMENT OF CARDIO-VASCULAR EMERGENCIES

The Program Committee has appointed Dr. E. F. Horine, Louisville, Chairman to conduct a Round Table discussion of the treatment of emergencies arising with cardio-vascular diseases. The tentative outline is as follows:

1—Syncope:

- (a) arising from non-cardiac factors,
- (b) arising from cardiac causes;

2—Paroxysmal dyspnoea ("cardiac asthma");

3—Angina pectoris;

4—Coronary thrombosis;

5—Pulmonary embolism.

The chairman would appreciate it if members will please write him immediately concerning any other emergencies of a cardio-vascular nature, or any special questions they may desire included in the discussion. Also, frank criticism of the tentative outline will be appreciated.

This discussion is scheduled to follow the close of one of the afternoon sessions. By allotting this time, the Program Committee has thus wisely arranged to permit those who desire to attend to do so without missing any of the scheduled essays.

## APPROVED LABORATORIES

Again we are publishing the list of laboratories approved by the State Commissioner of Health for the performance of the serological tests in accordance with the prerequisites of the Prenatal and Premarital Laws. This list includes all the evaluations up to July 1, 1941. Any physician desiring the convenience of an approved laboratory may have one by applying to the Commissioner of Health and complying with the regulations approved by the National Committee on the Evaluation of Laboratories for the Serodiagnosis of Syphilis of the United States Public Health Service.

It is always important to remember that no examination may be made and charged

for by any hospital or any corporation per se. Pathology and laboratory work constitute an integral part of the practice of medicine and neither hospitals nor corporations may engage in the practice of medicine for remuneration in Kentucky. Hospitals cannot make tests for lay individuals as such; all such requests must come from licensed physicians. The procedure is for physicians using approved laboratories to include the laboratory costs in their fees and, in turn, remit these costs to the laboratories making the tests. Together we are engaged in the campaign to reduce the ravages of syphilis and it will benefit all the people so long as everyone cooperates in this undertaking.

A list of approved laboratories follows:

CITY	DIRECTOR OF LABORATORY	NAME OF LABORATORY
Ashland	R. D. Higgins, M. D. Leslie H. Winans, M. D.	Boyd County Health Department Kiug's Daughters' Hospital
Bowling Green	G. Y. Graves, M. D. Hoy Newman, M. D.	Graves-Gilbert Clinic Physicians Laboratory
Corbin	F. S. Smith, M. D.	Smith Hospital
Covington	Alfred M. Glazer, M. D. Alfred M. Glazer, M. D.	Booth Memorial Hospital St. Elizabeth's Hospital
Dayton	S. P. Garrissou, M. D.	Speers Memorial Hospital
Franklin	L. R. Wilson, M. D.	Wilson Clinic
Glasgow	C. C. Turner, M. D.	T. J. Samson Community Hospital
Greenville	G. L. Simpson, M. D.	Muhlenberg Community Hospital
Harlan	W. R. Parks, M. D.	Harlan Diagnostic Laboratory
Harrodsburg	C. B. Van Arsdall, M. D.	Mercer Laboratory
Hopkinsville	Frank H. Bassett, M. D.	Christiau County Diagnostic Laboratory
Jamestown	M. M. Lawrence, M. D.	M. M. Lawrence, M. D.
Jenkins	H. H. Howse, M. D.	Jenkins Hospital
Lexington	Theo. L. Adams, M. D. Kenneth R. Andrews, M. D. Arthur Bach, M. D. Irving F. Kanner, M. D. E. S. Maxwell, M. D. E. S. Maxwell, M. D.	Central Clinical Laboratory Kenneth R. Andrews, M. D. Arthur Bach, M. D. Irving F. Kanner, M. D. Lexington Clinic St. Joseph's Hospital
Louisville	C. W. Dowden, M. D. Morris Flexner, M. D. H. M. Weeter, M. D. J. D. Allen, M. D. J. M. Kinsman, M. D. Hugh R. Leavell, M. D. W. H. Allen, M. D. A. B. Loveman, M. D. W. C. Martin, M. D. and Clyde McNeill, M. D. Robert F. Monroe, M. D. E. S. Greenwood, M. D. James G. Hutchinson, M. D. J. D. Allen, M. D. H. M. Weeter, M. D. H. M. Weeter, M. D. L. H. South, M. D. H. M. Weeter, M. D.	Dowden and Dowden Laboratory Morris Flexner, M. D. Jewish Hospital Kentucky Baptist Hospital J. M. Kinsman, M. D. Louisville City Hospital Louisville Research Laboratory A. B. Loveman, M. D.  Drs. Martin and McNeill Robert F. Monroe, M. D. Norton Memorial Infirmary Physicians Laboratory St. Anthony's Hospital St. Joseph's Hospital S. S. Mary & Elizabeth Hospital State Department of Health Harry M. Weeter Clinical Laboratory
Lynch	Carlisle R. Petty, M. D.	Lynch Hospital
Mayfield	James T. Fuller, M. D. E. C. Walter, M. D.	Fuller-Gilliam Hospital Mayfield Hospital
Maysville	A. R. Quigley, M. D.	Hayswood Hospital
Middlesboro	C. C. Brummett, M. D.	Middlesboro Hospital
Morganfield	D. L. Vaughn, M. D.	D. L. Vaughn, M. D.
Murray	E. D. Fisher, M. D.	Wm. Mason Memorial Hospital
Newport	Luther Bach, M. D.	Luther Bach, M. D.
Owensboro	I. J. Hoover, M. D. J. M. Coffman, M. D.	Clinical Laboratory Coffman-Sherman Laboratory
Paducah	V. L. Powell, M. D. Warren P. Sights, M. D.	Illinois Central Hospital Riverside Hospital
Paintsville	F. M. Picklesimer, M. D. Lou C. Hall, M. D.	Paintsville Clinic Paintsville Hospital
Paris	Wm. Kenney, M. D. J. C. Hart, M. D.	Wm. Kenney, M. D. Massie Memorial Hospital
Pikeville	Henry I. Berman, M. D.	Methodist Hospital
Pineville	Chas. B. Stacy, M. D.	Pineville Community Hospital
Russell	C. B. Johnson, M. D.	Johnson Serological Laboratory
Wheelwright	J. W. Bailey, M. D.	Inland Steel Company
Winchester	Edward P. Guerrant, M. D.	Guerrant Clinic Hospital Laboratory



## SCIENTIFIC EDITORIAL

THE USE AND ABUSE OF  
SUN GLASSES

The tourist season is with us again and coincidentally it is becoming more and more noticeable that the American public has "gone Hollywood" at it applies to the wearing of so called sun glasses. Blinkergoggles tinted in various bright colors to match bathing suits and other garments, the color of the hair, tinted finger nails and rouged lips, are part of the adornment prevalent at sea shore and other resorts, and spectacles equipped with glass or compositions of all tints have also become very popular.

This promiscuous use of colored goggles and spectacles has so increased the demand for sun glasses that they are now found on sale in most drug stores, cigar stores, soft drink stands, Five and Ten Cent Stores, and are even being peddled by the cigarette girls at ball parks and other places of amusement.

It is problematical whether this fad of wearing dark glasses is attributable to the more frequent exposure of the public to sun light in recent years and to the greater brilliancy of night illumination and a coincident visual discomfort, or whether the public is actuated in the use of disfiguring and grotesque spectacles and blinkergoggles merely by the desire to conform to the latest glamour fad.

The need of colored glasses as a protection to the eyes against excessive light and by persons very sensitive to normal light as well as those afflicted with eye disease has long been recognized. Confucius spoke of the custom of the Chinese in the pre-Christian era of wearing spectacles equipped with segments of precious and semi precious stones, such as emerald, sapphire, amethyst, aquamarine, as a protection against strong light and on account of a supposed health measure. However the general impression prevails that the orientals used glasses more especially for religious and ornamental purposes and as an emblem of caste.

When Sir Roger Bacon, in the middle of the 13th Century, introduced the use of clear glasses to provide magnification of objects in the event of failing vision coincident with advanced age, he also revived the custom of wearing colored glass to shade the eyes and suggested green as the most restful tint. From then up to the present all kinds of material have been employed in the production of protective

glasses, regardless of tint and shade and the nature of the substance selected. Most of them were made of brown or moulded glass marked by such optical imperfections as air bubbles, scratches, and surface irregularities, and some even possessed refractive properties—all of which could prove harmful to the eyes of the wearer.

The popular colors of cheap sun glasses are black, green, amber and blue. Of these, black brings about a neutral glass by a fairly uniform absorption of the rays throughout the spectrum and thus mitigates the intensity of light. When the black or smoked glasses are properly ground and the surfaces polished they serve a useful purpose in modifying reflected glare from snow, white sand and water, and have proven quite serviceable when employed temporarily in outdoor activities such as fishing, yachting, skiing, boating, and by the sun fielders during base ball games. They do possess the one objectionable feature of detracting from the visibility of objects viewed through them. However, scientific studies have recently been made regarding the absorption and transmission qualities of tinted glass in the endeavor to produce a material which would reduce intolerance to light and yet maintain normal visual acuity.

Fiezel, of Paris, was the pioneer in this research, when, in 1880, he incorporated chemicals to the ingredients of glass with a resulting yellow-green product which filtered the ultra violet or actinic rays from the visible spectrum and thereby controlled the glare of light. Several years later Sir Isaac Crooks of London improved on the original discovery when he developed a formula which absorbed the infra red or heat rays from the spectrum coincidentally with the ultra violet. This product further offered the cosmetic advantage of replacing the unsightly black color with a weak sage green. Later Crooks and others modified the original formula making it possible to filter out only the excess quantity or "dead load" of ultra violet and infra red rays from the spectrum, leaving only those essential to comfortable visibility.

The advent of glass with selective property has brought about the manufacture of a great many protective lenses under various trade names, some of merit and some of indifferent virtue. The most recent creation in this line and one which gives promise of considerable service is credited to Edwin Land. It consists of a transparent film of cellulose composition made up

of myriads of microscopic crystals of an organic iodine compound, cemented in parallel rows between two layers of colorless glass. This material, which has been designated by the inventor as Polaroid glass, has come closer to the filtering out of the disturbing, harmful glare than was formerly possible. This was accomplished by an absorption of the horizontal light waves which represent most of the blinding reflected light rays. Polaroid glass has a near normal color through which objects are seen clearly in their normal color and without a glare. It has the further advantage that it can be ground to prescription.

Although tinted glass has been rather definitely standardized by the United States Department of Agriculture for its use in sun light research regarding reflected light after dark is yet in its incipency. However it may be assumed that manufacturing optical firms are on the way to furnish something which will enable motorists to drive at night with more comfort and less danger.

Based upon our present knowledge of eye protection spectacles it is quite evident that the medium employed in their manufacture should be Crown glass properly ground and burnished. Where the question of the need of a medium merely to overcome the intolerance to light is to be considered and perfect visual acuity is a minor consideration, plain black glass worn only during the period of exposure to strong light would meet the indication in the great majority of cases. However their more or less permanent use should be guarded against chiefly because this habit would finally make it difficult or impossible to dispense with their use. For those in whom eye strain is apparent selective glasses ground to conform to the refractive error would have to be considered.

The indiscriminate use of fancy goggles and glasses would hardly find approval on the part of the ophthalmologist even though the harmful action on the eyes is not one of serious importance. After all the decision for or against their use as show pieces rests with those careless of their comfort and welfare of their eyes.

The choice of selective lenses adaptable to the various economic and industrial needs would naturally rest with those experienced in the technique of refraction and familiar with the absorptive properties of the various sun protective glasses on the market.

ADOLPH O. PFINGST, M. D.

## CLINICAL CONSIDERATION OF THE CLIMACTERIUM

Leo W. Zimmerman, M. D.

Louisville

I wish to present for discussion to-night a subject which I believe, in general, has been considered too lightly. It is a condition which by no means limits itself to one or two specialties, but is a complicating factor met with in nearly all branches of the practice of medicine. I am convinced that this group of patients is too likely to fall into the popular classification of "screw-balls." There is an overwhelming feeling prevailing that the climacterium and routine estrogenic therapy go hand in hand, that once the diagnosis is made, the treatment is obvious.

What is true here is true in most of our clinical problems. They may be treated with a limited amount of individual effort and interest, becoming monotonous and uninteresting, or we may attack the problems from a scientific and logical viewpoint thereby creating a tremendous pleasure in the handling of the cases, as well as giving our patients far better results.

By way of criticism, I believe that the attitude of the physician toward these patients is too many times wrong. Let us consider the attitude of the patient, an average climacteric. She is truly miserable and needs help and sympathy. She realizes the multiplicity of symptoms, the incoordination of definite clinical patterns. She is almost too embarrassed to discuss her many symptoms with her physician, yet, she turns them over and over in her mind, attempting to reach a comforting solution. The tendency, however, is usually in the wrong direction, that is, she comes to a very unhappy and distressing conclusion, chief among these being cancer and insanity.

It has been my lot as a Gynecologist, to see a more than average number of these cases, and I am firmly convinced that the development of a sympathetic and understanding attitude on my part, gaining complete confidence of my patient, is just as important as the therapeutic measures which must be carried out. We must of necessity broaden our view in this work, realizing that in many clinical conditions the patient alone is the victim, while in the climacterium the husband and the immediate family are subjected

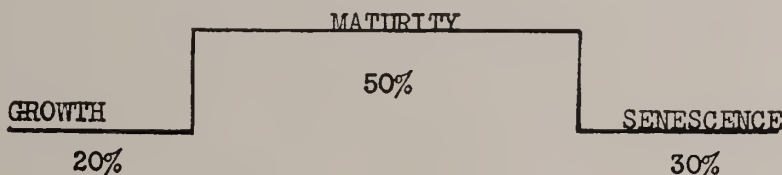


to almost as much psychic disturbance as the patient herself. The irritability, chronic complaining and many times unbalanced judgement of the wife makes tremendous tension on both the marital and economic happiness of the family. We must therefore consider the fact that the results of our interest and treatment very deeply affect more than the patient in front of us. I always make it a point to have periodic consultations with the husband, ex-

plaining the wife's condition, advising him as to what to expect as well as attempting to develop in him an attitude of cooperation. Many times I find an exacting and critical husband one of the greatest drawbacks in the progress and improvement of the patient.

By way of review, let us take a look into the factors involved in the explanation of the climacterium.

DIAGRAM 1

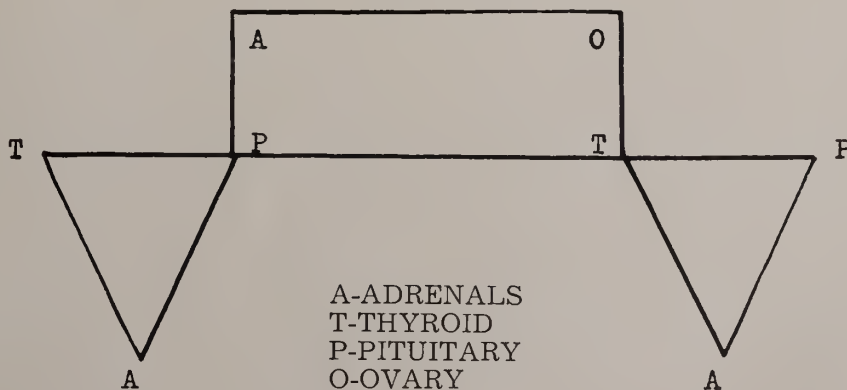


This simple diagram illustrates the three chief phases in the female life. The first is the period of growth; the second, of maturity; and the third, senescence. Our first important change is from the growth to the maturity stage. The next is the transition from maturity to senescence which marks the termination of the reproductive life. You will notice that the maturity phase occupies fifty percent of the life, twenty percent being given to the growth period and an approximate thirty percent to senescence. It is the adjustment period between the second and third phases with which we are concerned in this discussion. Let us not confuse the terms climacterium and menopause. The climacterium is the term applied to this whole adjustment stage while the term menopause, strictly speaking, means the

cessation of the menstrual periods. The term menopause compares in its application with the term menarche which is the onset of bleeding in the first transitional phase.

I believe it is unimportant to spend a great deal of time on the ages at which these changes take place, except to say that sixty-five percent of the women develop the menopause between the ages of forty-five and fifty. There is no consistent relationship between an early puberty and an early menopause; nor does gestation seem to have any noteworthy effect. We do find a hereditary or familial tendency especially in the early onsets. Pelvic pathology is present, as a rule, in cases found to be menstruating beyond the age of fifty-two.

DIAGRAM 2



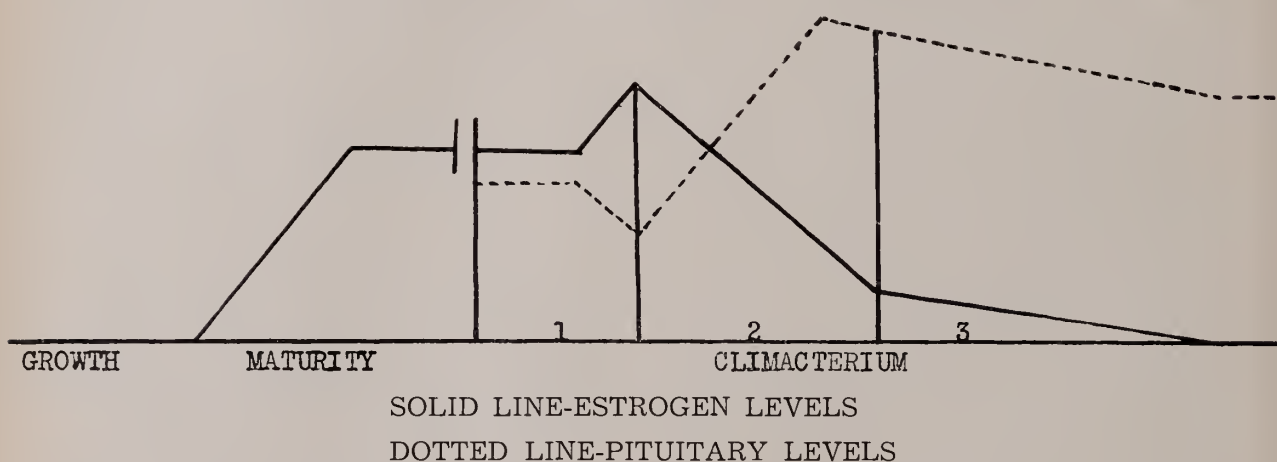
Realizing the instability and diversities of opinion in our endocrine problems, I hesitate to go into a very detailed discussion of this side of the picture. However, there are some underlying fundamentals which I believe are generally agreed upon, being important in developing a climacteric picture.

In the growth stage the endocrine balance is maintained chiefly through a triangular balance, consisting of the Thyroid, Pituitary and Adrenals. The second stage is a quadrilateral balance, brought about through the advent of ovarian activity. This first transition is truly a change of life. Effects of endocrine imbalance are numerous; chief among them the physical

growth and development, skin manifestations, thyroid upsets and personality changes. Normally, when the quadrilateral balance is established, all runs smooth until we reach the next transitional stage marked by the withdrawal of the ovary and the return to the triangular balance.

I might say here, that only a small percentage of women really have serious difficulties during the climacterium. In a recent survey of 1200 women, it was found that sixteen percent had absolutely no trouble, seventy-two percent were able to carry on without interruption and only twelve percent were incapacitated for varying periods of time.

DIAGRAM 3

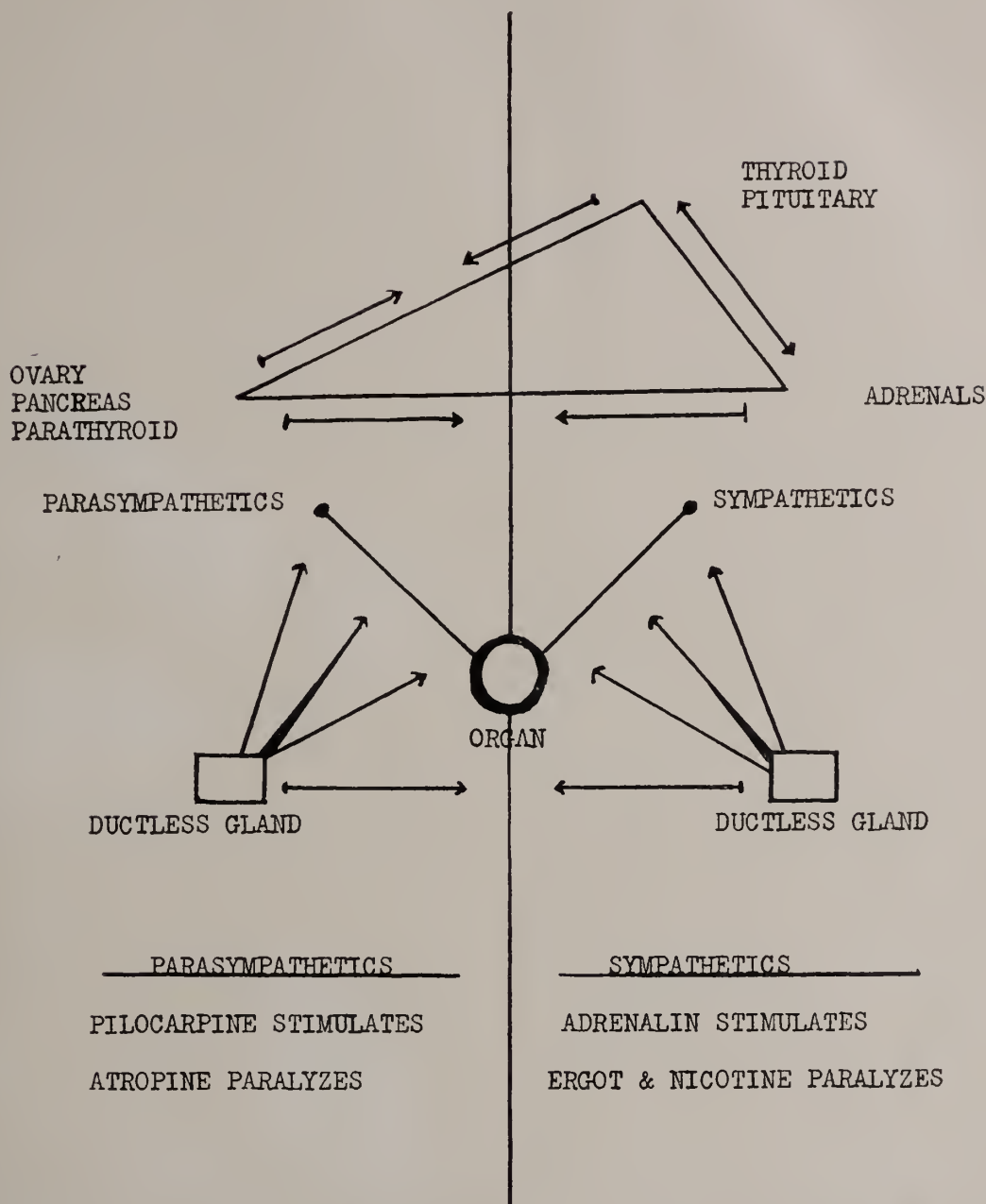


This diagram gives a graphic representation of what happens in ovarian and pituitary activity during a normal climacterium. The beginning of the base line at the left of the diagram indicates little or no ovarian activity, with a rather sharp but even acceleration at the beginning of the maturity phase. This level is maintained through the second phase until we come to the beginning of the climacterium. Here we notice a rise in activity in the first division of the climacterium followed by a rather gradual decrease in the second stage and then a less precipitous decrease to the base line in the third stage. It is interesting to note the pituitary activity during these three stages of the climacterium; its course is almost exactly opposite that of ovarian activity. These findings are in keeping with the physiological antagonism existing between the pituitary and ovary. Most of the bleeding symptoms occur

at the end of phase one and the early part of phase two, the menopause itself becoming manifest in stage two. From this diagram we note the much increased level of pituitary activity in the latter half of the second stage. The multiplicity of symptoms which occur at this time are not due intrinsically to lowered volume of estrogen but, on the other hand, to the marked increase in the pituitary levels. The estrogens are given at this time, not primarily for their physiological deficiency, but to antagonize or inhibit the marked increase in pituitary activity. It is the anticipation and adjustment of this two gland relationship which forms our major problem in the second stage. In the last stage, estrogen levels are lower, the pituitary dropping with it until we have a final solution in which the estrogens are no more a complicating factor, and we have returned to the triangular balance of senescence.



DIAGRAM 4



Now let us look at the relationships between the endocrine and autonomic nervous systems. Aside from our consideration of the central nervous system, the door is opened to a myriad of symptoms and complexities due to this close relationship. As you note in the diagram, the autonomies are divided into two groups, namely, the sympathetics and the parasympathetics. This system innervates the various organs of the body, the resulting function of these organs being largely dependent upon the normal stimulation and balanced relationship between the sym-

pathetics and parasympathetics. The normal function of the autonomies is in turn largely dependent upon the type of support it receives from the endocrine system.

Realizing that the autonomic system is paired and antagonistic, one a stimulator and the other a depressor, it soon becomes apparent that a multitude of uncorrelated symptoms are possible. Taking into consideration the fact that the respiratory, cardiovascular and secretory systems alone are dependent upon balanced sympathetic stimulation, we can realize the possible

complex pictures that may result from an abnormal relationship. As a matter of fact, one of the outstanding findings in the climacterium is the number of unrelated symptoms which put together do not form a clinical picture, characteristic of a known clinical entity.

You will note at the top of this diagram the relationships between the endocrines involved in this discussion. Synergism between thyroid, pituitary and adrenals on the right side, these glands being antagonistic to the ovary, pancreas and parathyroid. These glands on the right being associated with sympathetic stimulation, the ones on the left stimulating the parasympathetics. The term stimulating is not exactly correct here; the endocrines have more of a supporting effect on the autonomies. In other words, they must keep the autonomies in a state of delicacy of response. If a gland supporting the parasympathetics is rendered less active, the normal activity of the sympathetics becomes more prominent and vice versa. Vagatonia is a true example of the hyperdelicacy of the parasympathetics. The vagus reacts too easily and one of the prominent symptoms, bradycardia, is brought about. The reactions occurring on the right side fall into the group of the sympathetico-atonias, the condition which is present in the second phase of the climacterium in which we have lowered estrogen and increased pituitary. This is the stage of hot flashes and flushes, sweating and many other symptoms. This picture on the right is also evident in pregnancy. A classical example of the hyperdelicacy of the sympathetics being shown by the reaction of the pupil to the application of a 1:1000 solution of Adrenalin after the fifth week. This same balance explains the relaxed condition of many of the involuntary muscles during pregnancy, especially the bladder and ureters. This suggests an explanation of the prevalence of genital-urinary infections during gestation. It is interesting to note that vagatonic women are always improved during pregnancy, due to the shift in endocrine balance and the tendency towards the sympathetico-atonias. We frequently see the asthmatics and hay fever patients decidedly improved during pregnancy. Another clinical feature of interest is the ease with which a glycosuria is produced with a small injection of Adrenalin.

I have listed here (Diagram 5) the endocrine set-up and the more prominent clinical happenings under each. While it is true that in many cases we do not have clear cut symptoms which would catalogue a patient on the right or the left, nevertheless, if the symptoms listed here are present and prominent we can at once clinically differentiate between the parasympathetic and sympathetic imbalances.

Through a careful study of this diagram we are able to explain many of the pitfalls in diagnosis in women of this age. We can understand why so many women are treated for a colitis which does not exist per se; why the so-called hypertensives have such wide fluctuations in blood pressure readings; why we obtain such wide variations in the B.M.R. readings; the frequency of bursitis, arthritis, etc.

**DIAGNOSIS:** This is usually fairly simple considering the age and history. The differential diagnosis is more important at times. We must always regard the irregular and especially profuse bleedings with suspicion and employ the proper gynecological procedures in ruling out endometrial disease, missed abortions and neoplasms.

**PROGNOSIS:** In uncomplicated cases there is no effect on the morbidity and longevity. The majority of our cases respond favorably to the proper treatment. Many times the mental complications are the most serious, chief among these being the involutional psychosis, melancholia and paranoia. Certainly we must look to our friends in the department of Psychiatry for help in these advanced cases.

**TREATMENT:** Treatment is by no means empirical. Each pathological case is one for individual study and therapy. In the first and third phase of the climacterium, estrogenic therapy is distinctly harmful. In the first phase we are already dealing with hyper-ovarian activity; while in the third phase we may disturb a balance which is being assumed. Prolonging estrogenic therapy deep into the third phase inhibits the physiological balance which must eventually come to pass. The administration of estrogens is indicated in the second phase, and here again wide latitudes obtain. Many less severe cases are carried along satisfactorily on 2000 to 4000 International Units once or twice a week, while others may demand 10,000 International Units daily for a week, or ten



DIAGRAM 5

## PARASYMPATHETICS

+ OVARY

- THYROID - Myxedema

- ADRENAL - Addison's

- PITUITARY

BLOOD PRESSURE - Lowered

PULSE RATE - Lowered

INTESTINES - Contracted

EYES - Pupils contracted

EOSINOPHILIA

GLYCOSURIA - Inhibits

CALCIUM - Excretion

GLANDS - Activated

## SYMPATHETICS

- OVARY

Physiological after climacterium  
during pregnancy and menses.  
Castration

+ THYROID - Graves disease

+ ADRENAL

+ PITUITARY - Acromegaly

BLOOD PRESSURE - Raised

PULSE RATE - Raised

INTESTINES - Dilated

EYES - Pupils dilated

EOSINOPENIA

GLYCOSURIA - Provokes

CALCIUM - Stores

GLANDS - Depressed

days until pituitary domination is secured. In this phase frequent examination of the vaginal smears and the pituitary determination in the blood and urine serve as a very helpful procedure.

In some cases the ovary runs a very up and down course in the second phase, the patient showing wide swings in the pulse rate, blood pressure and metabolism. When this phase persists and I feel that I am dealing with an ovary which shows no tendency to adjust its level, I have many times resorted to X-ray castration in order to take the irresponsible ovary out of the picture. I then set a course of estrogen therapy, beginning with sufficient dosage

to dominate the pituitary, extending the treatment with a gradual reduction therapy until balance is obtained.

While thyroid has not been emphasized in this brief discussion, it nevertheless remains a potent factor in the balance. Through our basal metabolism determinations and clinical observations, this gland must be watched at all times. It is not infrequent to find a case requiring iodide administration at one period and thyroid extract at another time.

Relaxation and sleep are tremendously important, sedation must be used freely at times. Many times I hospitalize the patients and keep them deep with barbitu-

rates for a period of five to seven days until they build up a nervous balance and reserve. As I mentioned previously, psycho-therapy is indispensable.

In closing, I must say that a number of interesting features have not been discussed. The pathology, for instance, is fascinating; the variations in the appearance of the menopause; postclimacteric bleedings; postclimacteric pregnancy; the frequency of metropathia hemorrhagica in the climacterium; variations in the duration; changes in libido, etc.

I have attempted to present some of the fundamentals upon which I have based my treatment of the climacteric, and I hope that through this brief discussion, a kindlier, more sympathetic and scientific attitude may be engendered in the handling of this group of patients.

(417 HEYBURN BLDG.)

#### DISCUSSION

**R. A. Bate:** The essayist has undertaken a very excellent way of demonstrating his ideas, with geometrical figures. However, any endocrinological theorem is very difficult of proof by hard and fast lines. The over-lapping effect of one glandular deficiency, or another's excess produce a hormone imbalance of greater import, then portrayed by fast lines.

For instance, a normal thyroid function may exist in the presence of an hyperadrenalism. Some symptoms of hypo-thyroidism will appear, in that the synergistic action of the suprarenals is not balanced.

It is obvious there will be a distinction, nevertheless, there may appear a hypothyroid-like deficiency because actually the hyperadrenalism is not physiologically balanced.

The effects of the two endocrine secretions upon the sympathetic and the parasympathetic systems, thus confuse. Relaxation and synchronous muscular contractions throughout their physiologic fields may actually appear the reverse of true deficiency. The presence of the calcium, sodium and potassium salts present, likewise, enter into the pharmacodynamics of these endocrines.

I am inclined to precede Doctor Zimmerman's periods as to when affected by the ductless glands. Endocrine influence begins even in the foetus. Hyperthymic action may cause hypothyroidism (somewhat in the manner just related) and the hypothyroidism in its turn retards pituitary development, which battle may be represented by the so called "physiologic hyperthyroid" or goiter of puberty.

Like tonsillar function, thymic function wanes, until after about twenty-three, in our climate and vitaminous district, then the pituitary assumes more or less complete control.

The posterior pituitary probably acts as the "governor" or regulator of endocrine activity.

The basophilic cells of the anterior pituitary are regarded as the source from whence come the hormones upon which the gonads depend for function. Cessation of this secretion either from pressure by tumor, or otherwise, causes cessation of menstruation.

The gonadotropic and the gonad hormones operate synchronously to produce oestrogenic results, just as do the thyroid and suprarenals in obtaining their rhythm of heart and peristalsis.

The endocrine system works together. Disturbance of a lesser cog, or autacoid supply unbalances more or less the entire system, but especially the estrogenic. Hypothyroidism and the accumulation of fat at the climacteric are evidences of the imbalance accompanying cessation of the gonadotropic hormones.

**R. A. Bate, Jr.:** In the early period of the climacterium, when the blood-estrogens are increasing to an abnormal level, what is the best form of treatment, if such is necessary: sedation, injections of chorionic gonadotropin, or just what would be indicated?

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#### VIRGIL PENDLETON GIBNEY

D. C. PATTERSON, M. D.

Bridgeport, Conn.

Dr. Virgil Pendleton Gibney was born September 29th, 1847 in Jessamine County, Kentucky. His grandfather, Alexander Gibney, came from the north of Ireland and settling in Kentucky late in the 18th century, became a prominent citizen of Lexington. At his death the Lexington papers stated, "Died Alexander Gibney for 46 years a resident of the city. He was 76 years of age and acted his humble part in life without fear and without reproach and when the toils of life were over, he died as he had lived, a consistent Christian and an honest man." Dr. Gibney's father, Dr. Robert A. Gibney, was born in Lexington in 1816, and practiced his profession for forty years in that city and in Nicholasville. While in Lexington he took an active part in civic affairs and was for some time a member of the city council. On his death in 1874 the council passed the following resolution, "The Mayor and Council have heard with sincere regrets of the death of Dr. Robert A. Gibney who for the past four years has been a member of this body, and in remembrance of his fidelity, industry and courtesy as a councilman, of his many public and private virtues and of our personal friendship for him it is re-



solved that we recognize in his death a public loss to the city of which he has been an enterprising citizen, and an intelligent and faithful servant." Dr. Gibney's mother, Amanda Weagley, was born in 1823 in Fayette County, as the record has it, "About 7 miles from Lexington on Old Frankfort Pike, on left hand side of road."

Dr. Gibney's boyhood was spent in and about Nicholasville and Lexington. At the age of five he had a severe injury to his right hand which resulted in the loss of the third and fourth fingers. In spite of the absence of these digits he possessed rare dexterity. A kindly old lady asked him once if he had lost the fingers as the result of his surgical work. "No," he replied "a dinky boy took them off with a log of wood."

He received his early education in the schools of Nicholasville, spent a year at Georgetown College, and three years at Kentucky University, now Transylvania, receiving an A. B. degree in 1869. He spent a year in medicine at the University of Louisville, then came to New York and received the degree of M. D. from Bellevue Hospital Medical College in 1871. He landed in New York on his 21st birthday going by way of Albany so as to have a ride on a boat. In 1879 he was granted a M. A. degree by Kentucky University and in 1899 was honored by Transylvania with an L. L. D.

After he received his medical degree, Dr. Gibney decided to remain in New York, and looked about for an internship. Whether or not he had made up his mind at that time to follow orthopedic work is not known, possibly he had, for while at the medical school he had been greatly impressed with the work and lectures of Dr. L. A. Sayre.

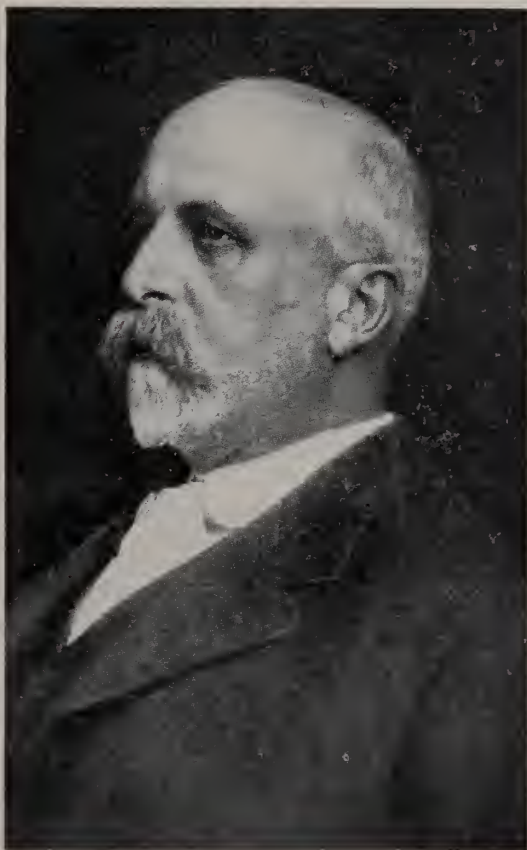
He obtained a position at the recently formed Hospital for the Care of the Ruptured and Crippled, and became the first interne at that institution.

In 1862 Dr. James Knight with the aid of a few men of prominence and means, organized the Society for the Relief of the Ruptured and Crippled. For 20 years he had been working with the crippled children of New York and the society was the result of his indefatigable efforts. In 1870 a modern building was erected at 42nd St. and Lexington Avenue, and it was here that Dr. Gibney started his internship, in 1871.

In 1884 Dr. Gibney published his book on "The Diseases of the Hip." This was the result of his studies of over two thousand cases that he had seen at the hospital, all

of them treated by the expectant method. Dr. Beekman says, "Dr. Gibney had formulated his own opinions as to how they should have been cared for. It seems he believed that the tuberculous hip should be placed at rest by means of traction. The so called 'American Method,' and more advanced cases operated upon." This was quite contrary to Dr. Knight's practice, and his resentment had culminated in Dr. Gibney's resignation. Before starting in private practice Dr. Gibney went abroad to study foreign methods of treatment of bone and joint disease. He was much impressed with the work of Hugh Owen Thomas and Robert Jones in Liverpool, and they became great friends.

In 1887 Dr. Knight died and Dr. Gibney was made Surgeon in Chief of the Hospital for the Ruptured and Crippled. He continued in that position until 1924, when he was appointed Surgeon in Chief Emeritus. The growth and achievements of that in-



*J. P. Gibney*

stitution were due in great part to his ability as a surgeon and an administrator. He surrounded himself with the most capable men he could get. Drs. Bull, Coley, Whitman, Janeway, Holt and other leaders in the profession became members of his staff and worked untiringly to advance the hospital's interests.

In his history of the Hospital for the Ruptured and Crippled Dr. Beekman says "He built up the Institution from what had been little more than a home for incurable children when he took charge, to a modern hospital which was fully equipped for the type of special work that was required, and was manned by a staff of specialists in Orthopedic and General Surgery composed of many who were acknowledged in their respective fields."

The number of eminent Orthopedic surgeons who have gone out from the Hospital for the Ruptured and Crippled testify to the training they received under his direction, and I doubt if any left that didn't have the greatest admiration and respect for their devoted friend. I once heard Dr. George D. Stewart describe Dr. Gibney as the most loved man in New York. In his honor a wing of the hospital has been called the Gibney Pavillion, and grateful alumni have established the Gibney Fellowship.

He was one of the first to carry out a real follow up record on discharged patients, and to engage a social service worker to investigate their living conditions and see that treatment was continued.

In 1882 with other leaders of the profession in New York he aided in organizing the Polyclinic Medical School, where he held the Professorship of Orthopedic Surgery for ten years. He appreciated the value of the hospital's connection with a teaching institution in the added stimulation to its staff. Moreover he opened the wards and outpatient departments of the hospital to undergraduate students.

When a chair of Orthopedic Surgery was established at Columbia College of Physicians and Surgeons in 1894, Dr. Gibney was appointed as Professor and held the position until June 1917.

He was one of the founders of the American Orthopedic Association in 1887 and became its first president. Twenty-five years later, he was again elected to that office. He used to tell with a chuckle that they proposed to elect him president every twenty-five years. In his first presidential address he foretold the advance and broadened field of Orthopedic Surgery.

In addition to his thirty three years of teaching, Dr. Gibney contributed many papers on orthopedic subjects to the medical press, and his vast experience coupled with his marked ability as a teacher made them especially valuable to the workers in the rapidly expanding field of Orthopedic Surgery.

The adhesive plaster dressing for sprained ankles which bears his name was not of his designing and he disclaimed any credit for its origin, even publishing an article to that effect. He had seen the treatment used by an Army Surgeon in Texas, and appreciating its advantages had adopted the method and advocated its employment.

The esteem in which he was held by his colleagues is shown by the fact that two of America's outstanding text books were dedicated to him, namely, Dr. Royal Whitman's "Orthopedic Surgery" and Dr. L. Emmet Holt's "Diseases of Children."

At the time of his death Sir Robert Jones wrote "From my earliest recollections Dr. Gibney's name has been before me, as one of the greatest pioneer surgeons of America. He was beloved of the profession. Among the many hundreds of Americans who came to me in this Country I have never heard a word but of affection in relation to him. His mind and heart were above all petty things, his views were broad and generous. He had a good word to say, or was silent. What an example of character and achievement to the younger generation of surgeons who looked upon him as the Father of Orthopedics! I always felt so impressed by his modesty in the old days and I learned much from his teaching."

The doctor's kindly disposition endeared him to everyone he came in contact with; associates, patients and acquaintances. He was always encouraging to the younger men, and ever ready to help them, however he quickly became indignant at any neglect of duty or of kindness to a patient. His office waiting room was generally filled with a mixture of patients from every strata of society, and from all quarters of the country including South America.

When at his summer home in Bridgeport he was cheerfully and charitably at the call of any doctor needing assistance, and applying a body cast in a third floor tenement room on a hot summer day never ruffled his genial disposition.

Dr. Gibney died at his home in Bridgeport, Conn. on June 16, 1927 after an illness of several years. Mrs. Gibney and three children survive him.



## PROSTATISM

W. V. PIERCE, M. D.

Covington

The problem of prostatism is one of the most universal with which medical science is confronted. It is a well known fact that one out of three men between the ages of sixty and ninety have enlargement of the prostate gland to a sufficient degree to cause some obstruction and of these, probably half will have definite clinical symptoms resulting therefrom. Assuming that half of our older population are males, this means that about one out of twelve persons in the latter decades are sufferers from this condition.

In his classical study of specimens of prostates taken from 1200 consecutive autopsies done on males of all ages and dying from various conditions, Randall has found the following interesting facts: about 300, or approximately one in four, showed some form of prostatic pathology. Of these 300 cases, 70% showed benign hypertrophy, 18% were fibrous median bars, 5% were prostatic infections (abscesses) and 5% were carcinoma. This incidence of carcinoma (one case to each 13 of benign hypertrophy) is much lower than that usually reported from clinical statistics. Young found that one out of each 5 obstructing prostates which came to surgery in his clinic was malignant. The earliest case of benign hypertrophy found by Randall in his series was a 26 year old negro dying from an unrelated cause. There were 3 other cases under the age of 40, showing that, while uncommon, it is possible for a younger man to have this form of obstruction. As the age increases, the percentage increases. Roughly speaking, about 25% of men in the fifties show some degree of hypertrophy; 30% in the sixties, 40% in the seventies and 50% in the eighties. The earliest case of cancer of the prostate was found in a 48 year old male, and the peak of cancer involvement was in the 8th decade.

Fibrous median bars, (by which we mean obstruction to the outlet of the bladder neck, due to previous inflammation in and around the prostate) occur at earlier ages. These are seen occasionally in the twenties and thirties and reach their peak in the sixties. They are of interest in that they, unlike the benign hyperplasia, usually have an antecedent history of prostatitis

or urethritis. The evidence indicates that the man whose prostate has been the seat of frequent venereal or unrecognized non-venereal infections, is fairly well insured against a hypertrophy and practically guaranteed a median bar.

The fibrous bars will cause the same symptoms and give the same unfortunate end results, as the glandular hyperplasias. Why is senility so often attended by prostatic hypertrophy? There have been many theories advanced to attempt to explain this. Some observers have thought a familial or hereditary tendency to be present in certain families. Others have attributed the process to the result of hyperemic processes due to overstimulation during sex life. Still others (and most laymen seem to have this idea) attribute the hypertrophy to chronic infections in the gland due to an old attack of a venereal disease. None of these theories, at the present time, seem wholly tenable. The most widely accepted hypothesis today is that the hypertrophy is based upon the relation between the prostate and the testicles. Experimental evidence seems to have proven that in certain animals hypertrophy of the prostate is caused by deficient secretion of inhibin, a hormone secreted by the tubular or seminiferous cells of the testicle. This is alleged to control a secretion of the anterior lobe of the pituitary, which in turn controls the secretion of another hormone, androsten, by the interstitial cells of the testis. Lack of androsten causes atrophy of the prostate. Excess androsten, due to failure of secretion of inhibin as the sex life declines, causes hypertrophy of the prostate. The fact that prostatic hypertrophy in man comes on as the sex life begins to wane, would lend support to this theory.

The significance of prostatic obstructions and the danger to the life of the individual lies chiefly in the damage done to the kidney tissue. Prostatic abscesses and carcinomas, of course, will endanger life and health through sepsis or cachexia in addition to the obstruction offered to the flow of urine. Obstruction at the bladder neck, however, be it of whatever form, starts up the same vicious chain of events; first, hypertrophy and the thickening of the bladder muscle to force urine past the point of obstruction; this is the stage of compensation. Later, thinning and weakening of the bladder wall, with the formation of cellulæ, sacculæ and diverticulæ where the bladder mucosa may be said to "blow out" at weak points between the muscle bundles. Then comes weakness and loss of function of the

ureteral valves in the bladder, dilatation of the ureters and of the kidney pelvis, with thinning out of the kidney secreting substance. This leads to lowered kidney function and reserve, with accumulation of nitrogenous waste products in the blood; damage to the heart muscles and blood vessels in attempting to compensate for the lowered renal function by increased blood flow. Finally, uremia. Infection often is added to the picture, especially where catheter drainage has been necessary. Cystitis, pyelonephritis, stone formation in the bladder and kidney, and cortical abscesses of the kidney may intervene to hasten the end.

The degree of obstruction to the bladder outlet is not always proportional to the amount of prostatic enlargement present. A patient may carry a huge enlargement of the lateral lobes, weighing 100-200 grams for years without much retention of urine nor many symptoms; on the other hand, a small median lobe acting as a ball valve or a fibrous bar, may give rise to a chronic state of obstruction causing great damage to the bladder and kidneys and yet contain only 5 or 10 grams of tissue. This latter patient is the one who may often be completely cured of the obstruction by the resection of only a few bits of tissue with the electrical loop.

All of us are familiar with the usual clinical picture of prostatism. The earliest signs are gradual increase of frequency and especially of nocturia. The stream becomes smaller and less forceful. Increasing difficulty is experienced both in starting and stopping the stream. By and by, it gets so that a few drops of urine are always running down the trouser leg following each voiding. Still later, may come the so-called paradoxical incontinence or overflow of retention, in neglected cases, with complete inability to "hold water", so that the clothes are constantly saturated with urine. If infection is present, there are also pain over the bladder, burning and pain on voiding and extreme frequency and urgency.

These symptoms develop so slowly and insidiously in most cases that medical advice is usually not sought for a long time. Some of these histories may extend back for two, five, ten or even twenty years. We have in the hospital now, a patient with a median bar who has had urinary difficulties for 30 years, but only recently developed acute retention. In the meantime, damage to the kidneys has been taking place. The patient develops vague symptoms of

indigestion, loss of appetite, lack of ambition, mental deterioration and dullness, all due to the retention of nitrogenous waste products in the blood. The dry, parched tongue often seen in these late cases gives us a warning sign of impending uremia.

The thing which brings the patient to the doctor is usually retention, partial or complete. A few glasses of beer or a high-ball or two; exposure to cold and chilling, an acute respiratory infection; over indulgence in the Sunday dinner; these or other indiscretions may serve to cause congestion and swelling of the gland and thus a blocking of the outlet. Occasionally, one of these individuals is fortunate enough to develop an acute retention early in the disease. I say "fortunate," because in this way he is forced to seek relief before irreparable damage has been done to his tubules and glomeruli. The early removal of the obstruction may prolong his life for years and spare him many years of unnecessary discomfort and suffering.

I do not believe that it is the fault of the family doctor that these cases usually come to surgery so late and in such poor condition, any more than that many cancers of the breast or uterus are first seen in an inoperable stage. The patients themselves do not tell their families or their doctors of their trouble except as a last resort for fear they will be told they have to have an operation performed. It is unfortunate, however, that so many of these cases are first seen when they are almost in extremis, for in spite of the advanced age of this group of patients, they can stand careful surgery surprisingly well, provided their renal function and cardio vascular systems are in anything like passable order.

It is our belief that any middle aged or elderly man who is having increased frequency, nocturia, and slowness in starting the stream is entitled to a thorough urological examination to see what is causing the trouble.

The diagnosis of prostatic obstruction is not usually difficult. The history of urinary difficulties as mentioned above is in itself almost diagnostic. A urinalysis should be done, including sugar, albumin and microscopic examination for blood, pus, and casts. In non-infected cases, this may be negative except for a few blood or pus cells. Next, is the rectal examination, noting carefully changes in the size, contour and consistency of the gland. Stone like or wood like hardness of the gland, as well as the



presence of hard irregular nodules, suggest malignancy, of course. This examination can be easily done at the bedside or in the office in a few seconds time, yet it is surprising how often an elderly man is treated for bladder trouble by various urinary antiseptics and sedatives without a rectal examination having ever been performed. Next, with the patient stripped and lying on his back, the abdomen should be carefully inspected and palpated for the presence of a suprapubic tumor, indicating a distended bladder.

If, after voiding, the bladder can be plainly seen to be distended, and if rectal examination shows an enlarged prostate, the diagnosis is already made and catheterization should probably be omitted until the patient is in a hospital and arrangements made for gradual decompression; except of course in those cases requiring catheterization for immediate relief of suffering. Often, however, the obstructing tissue is a median lobe which does not present a gross enlargement to rectal examination; and frequently too, especially in obese individuals, a residual urine of several ounces may be present without producing a palpable suprapubic tumor. In either case, or in any case of doubt, the patient should be instructed to empty his bladder by voiding, and then catheterized to determine the amount of residual urine.

It goes without saying that the strictest aseptic care must be exercised in passing the catheter, as not infrequently cystitis and ascending kidney infection develop following this. In fact, there are cases on record where sepsis and death have followed the first catheterization.

As already mentioned, it has been our experience and that of most other urologists that a chronically distended bladder should not be emptied rapidly. Sudden emptying of such a bladder may lead to hemorrhage from bladder and kidneys, or even suppression of urine due to renal congestion. One case I recall seeing had rather severe bladder hemorrhages for two days following rapid withdrawal of 700 cc. on admission to the hospital. It is frequently necessary to differentiate between retention due to stricture and that due to prostate enlargement. The age of the patient will be of some help, as an acute retention in a man below 50 is more apt to be due to strictures, whereas in a man above 50 we think first of prostatic enlargement. History of gonorrhea or of injury to the urethra from a blow or fall in the past suggests

the likelihood of stricture. Rectal examination will aid in the diagnosis and finally the attempt to pass the catheter will help decide. The feel of the resistance offered to the catheter by the enlarged prostate usually differs slightly from that offered by a stricture.

It would be well for every practitioner to have in his bag at least one catheter with the olive or the coude tip, preferably a size 16 or 18 F as this will frequently slip by a huge prostate where the ordinary catheter tends to coil up in the urethra.

The use of a metal sound to attempt to relieve retention cannot be condemned too strongly. It will usually result only in a false passage, with troublesome bleeding and increased danger of sepsis.

With the preliminary examination done and the diagnosis of prostatism having been reached, there remains the problem of what to do for the patient. Shall he be treated palliatively, by intermittent catheterization or by the use of the retention catheter? Occasionally, the patient is in such extremely poor condition that to attempt anything more would be giving him a death sentence. These cases present trying problems to the busy practitioner, if economic circumstances prevent having the patient spend his remaining days in the hospital. It is hard to train the family to look after the catheter properly and however careful the doctor and the attendants, cystitis and urethritis develop sooner or later and a painful contracted bladder adds to the discomfort of the patient.

We have all received literature from the drug houses relative to the benefits of testosterone or other androgenic substances in relieving the symptoms of prostatism. The rationale of this treatment is based on the theory previously mentioned that the hypertrophy of the prostate is due to cessation of the elaboration of these hormones from the patient's own testicles. In some selected cases, there seem to have been a number of favorable results from this treatment, as far as symptoms are concerned. Even in these cases, however, there has been no diminution in the size of the gland and following cessation of treatment, there is usually a return to the former condition. Add to this the fact that the recommended dosage would cost the patient from \$5 to \$10 per week and it can be seen that this treatment is not apt to replace the older methods in the majority of cases. Our own results with the hormone treatment have not encouraged us to follow it up to any great extent, especially in view of the high

cost to the patient and the uncertain results to be expected.

The surgical treatment of prostatism is of course entirely a hospital procedure in the development of which, I might add, the operation is only one incident. The first step is usually institution of catheter drainage and where a chronic retention of a large residual has persisted for a long time, the bladder must be gradually decompressed. Bladder irrigations are carried out daily or oftener under aseptic care. The patient is carefully studied both on admission and throughout his stay, as to his general condition, heart, lungs, etc. Blood chemistry studies for nitrogenous waste products, functional tests for excretion of PSP dye, blood counts and urinalysis are essential in evaluating the patient's condition and deciding when he is in shape for operation. Urinary antiseptics such as urotropin, mandelic acid or the sulfanilamide derivatives are given wherever needed for infection of the urine. Fluids are forced as much as possible by mouth to 3000 cc or more and record is kept of intake and output. Attention is paid to the bowel elimination and mild laxatives given as needed. We like to get these patients out of bed as soon as possible, for many of them will lie still until they develop circulatory stasis or hypostatic pneumonia unless encouraged to get up and around. A good mental attitude is a great aid in recovery. Many of them do better in a ward bed surrounded by other old men in the same fix, and with whom they can compare notes as to their various troubles, than they do in a private room where they are denied companionship.

When the patient has stabilized sufficiently that the instrumentation is not apt to upset him again, a cystoscopy is usually done to get an exact picture of the type and amount of prostatic enlargement. The decision as to the type of operation to be done is based on the cystoscopic and rectal findings, plus an evaluation of the patient's general condition and ability to stand surgery. We have found it advisable to routinely ligate the vas deferens at the time of cystoscopy, as it takes only a few minutes, can be done under local anesthesia and is almost certain to prevent the occurrence of epididymitis; which happened all too frequently following prostatectomy before we adopted this routine.

The choice of operation depends on several factors, some of which have already been mentioned. As you know, there are the two principal methods of relieving prostatic obstruction; (a) to resect or cut

out with the electrical knife, enough of the obstructing tissue to create an adequate channel or groove to allow free passage of urine. When this operation first became popular a few years ago following the invention of the resectoscope, it was thought it would eventually almost entirely replace the older operation of prostatectomy. It possessed the advantages of avoiding open surgery; of being less shocking to the patient, and thus of rendering relief available to some bad risks who could not have stood open surgery; also of shortening the number of days in the hospital and in the bed, for the patient. Before long, however, it became apparent that this operation, too, had certain disadvantages. It was found that two and even three operations were sometimes necessary to remove sufficient tissue to give complete relief of symptoms, in the larger glands. Since the adenomatous tissue was not completely removed, some of the cases had recurrence of their obstruction a few years later. Sometimes a small nodule of cancer deep in the tissues was left behind, which would have been removed by complete prostatectomy. Cases which were incompletely resected frequently continued to run pus and blood in the urine for weeks or months afterwards, due to damage to the blood supply of the tissue or too deep coagulation of the tissue.

Consequently, in a good proportion of the cases, most urologists have again resorted to prostatectomy. We now feel that there is a definite place for both procedures, and that the proper selection of cases plays a big part in the post operative results.

For small glands, especially the fibrous type, for median bars and for carcinoma, resection is the operation of choice. Carcinomas are best treated by this method, because they are difficult to enucleate and because it is doubtful if they are often completely cured, once they can be clinically diagnosed. Hence, our chief aim is to give relief of the obstructive symptoms. Some cases have been able to get along fairly comfortably for one, two or even three years following resection until they finally die of metastasis or cachexia.

The larger glands, especially those which project up into the bladder, are best treated by complete removal. At one time, suprapubic prostatectomy carried a mortality of from 25 to 50%. This was due not so much to an inherent fault of the operation, as to failure to appreciate fully the need for proper preparation of the patient. The development of the two stage operation was a great forward step and lowers the



mortality rate by 20%. We employ this technique routinely for doing the open prostatectomy. We are usually able to minimize the operative shock of the first stage or preliminary cystotomy by doing it under local anesthesia. After a period of one or two weeks of suprapubic drainage, (longer in some of our poorer risks) we remove the suprapubic tube and enucleate the gland with the finger inserted through the old incision. Bleeding is then controlled by packing with gauze or by traction on a distended hemostatic bag. In a day or two, drainage through a urethral catheter is started and the suprapubic wound allowed to close.

Another type of operation which is employed by a large number of urologists is the perineal prostatectomy. It makes possible removal of the gland through the perineum without opening the bladder from above and in well trained hands possesses several advantages, especially those of complete removal of tissue, dependent drainage and minimal shock. The newer techniques of suture of bladder neck to urethra make for primary healing and shortened convalescence. The fact that this operation is not employed by a larger percentage of urologists is probably due to fear of two complications which have been known to occur in a few cases; incontinence and rectal fistulae, both of which are practically unknown nowadays following resection or suprapubic prostatectomy. In all of these procedures, the aim is of course to restore normal function to the bladder neck and prostatic urethra. Free passage of urine and complete emptying of the bladder remove the load of back pressure from the kidneys. Complete restoration of damaged renal function is not always possible, but the improvement in function and in the general condition of the patient is often amazing. It is to be hoped that earlier diagnosis of obstruction and continued improvements in operative techniques and pre-operative preparation of the patient will eventually lower the mortality from prostatism to a negligible figure.

The following is an analysis of 100 consecutive prostatectomies and resections from our own cases. Of this series, there were 69 two stage prostatectomies, two one stage prostatectomies and 31 cases who had transurethral resections. Some of these had more than one resection, there were in all 38 resections done on these 31 cases.

Of the 69 two stage prostatectomies,

there were five deaths; giving a mortality rate of 7.2%. There were no deaths among the two one stage prostatectomies. Of the 31 cases who had one or more transurethral resections, there were no immediate operative deaths, although there have been, I believe, 3 of this group who subsequently died from metastases. All of these, however, were kept comfortable as far as their ability to void was concerned and there is no evidence to indicate that the death was in any way due to the operative procedures. The operative mortality for the entire group, as can be seen, was 5%.

The average age of the entire group of 100 cases was 70 years. There was no significant difference in the average age of each group; being 69 years for the prostatectomy group and 71 years for the resection cases. The youngest prostatectomy case was 58 and the oldest 83. The youngest resection case was 50 and the oldest 83.

We did not have time to completely study the average hospitalization time for each group but we do know that it was somewhat shorter for the resection group. This is to be expected, as the time required for the two stage open operation is of necessity greater than that for the others.

In the 100 cases there were 13 cases of carcinoma. This is between the 5% found by Randall at autopsy and the 20% reported by Young from clinical observation. The average age of the cases having carcinoma was 72 years.

It should not be understood that the mortality figures given above represent the total number of deaths due to prostate obstructions coming under our care. There have been a few cases during this time which were in such poor condition that it was impossible to do more for them than to institute catheter drainage and who have died while on this conservative treatment without having ever reached a condition suitable to warrant surgery. There have also been a few others who had only a suprapubic drainage instituted in an effort to improve the renal function enough to permit of removal of the prostatic obstruction but who continued to progress down hill in spite of this. As to the functional results in this series; there have been no permanent fistulae, no cases of incontinence, (one patient was temporarily incontinent for a few weeks); and as far as I know, no recurrence of obstruction except in a few of the carcinoma cases.

## DISCUSSION

**W. R. Miner:** For obvious reasons, Dr. Pierce and I realized that the study of 100 of our patients who were operated upon for vesical neck obstruction has been of greater benefit and interest to ourselves than to any one else.

We are particularly impressed with the fact that all of our operative mortalities occurred in those patients who had suprapubic cystotomies or suprapubic prostatectomies performed, however, these patients all had rather large hyperplastic glands and it is questionable whether the mortality rate would have been appreciably lowered had resection been performed on all cases. One third of the 100 patients were operated by resection, because they had pathological conditions of the prostate gland which were particularly adaptable for resection.

Arteriosclerotic cardiovascular disease was the chief contributing factor to our operative mortality. Urinary tract infections take second place, they are being controlled and cured faster since the advent of the sulfanilamide group of drugs, but senile cardiovascular changes are practically always present in varying degrees. As a result of vascular changes in the brain, senile dementia is present all too frequently.

Keeping these patients up as much as possible and giving them fairly large doses of vitamin B complex has a beneficial effect.

Among these 100 patients we noted that two had large vesical calculi (many had small calculi); two had very large diverticula; two had two stage prostatectomies and developed carcinoma of posterior lobe later and two patients had cystotomies prior to resection.

Not included in the above list of patients, was an old gentleman who developed an enormous prostatic hypertrophy after having had a two stage prostatectomy some 12 years previously by a very capable urologist in another locality. This shining example has made us cautious in guaranteeing that recurrence of symptoms will never occur after prostatectomy.

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"Deaths from undernutrition are downward," says the Census bulletin. In 1930 the number of deaths from scurvy, rickets, beriberi and pellagra was more than 6,900. Year before last they numbered 2,656. There are times when a reader might almost be tempted to say that the Census bulletin was designed as a rejoinder to the pessimistic impression conveyed by Secretary Wickard's remarks at the Nutrition Conference. This purpose, of course, the bulletin disclaims. It states explicitly that the desired goal set by the Nutrition Conference has not yet been attained, "despite the tremendous improvement already made."

## SPONTANEOUS PNEUMOTHORAX

ROBERT J. GRIFFIN, M. D.

Lexington

Spontaneous pneumothorax is a condition in which there is a small break in the continuity of tissues, resulting in a mechanical dysfunction. The simple laws of physics, as they affect respiration, account for the anatomical and physiological disturbances resulting.

The usual uncomplicated course of a spontaneous pneumothorax has led Hammon to the following points regarding its definition. It occurs suddenly in an apparently healthy young individual, clears up uneventfully, and is not accompanied by fluid exudate, temperature elevation, or other constitutional symptoms.

The mechanism by which air enters the pleural space has been assumed to be by rupture of the visceral pleura through a congenital bulbus, an emphysematous bleb, or some pathological disease of the pleura, notably an adhesion. Earlier writers thought tuberculosis to be the underlying cause in the majority of cases. More recently the thought has been introduced that the more common mechanism is a seepage of air along the bronchial trunks eventually breaking into the pleural cavity from the mediastinum.

Autopsy material in the condition is scant, because the patient seldom dies. Kjaeryard was able to locate reports of nine autopsies with spontaneous pneumothorax, among which five showed a rupture of an emphysematous bleb. He began watching for these lung cysts or blebs at autopsy, often found some, and finally found two unexpected cases of pneumothorax, one of which had a ruptured air bleb. Others have reported autopsies in which no demonstrable rupture of the pleural surface was found by forcing water or air into the trachea.

A strong argument in favor of the theory that the air may follow along the vessels or bronchial trunks, then rupture into the pleural cavity from the mediastinum is the occurrence of pneumothorax with interstitial emphysema. Hammon reported seven cases of spontaneous interstitial emphysema of the lungs, with a small pneumothorax of the left side noted in two. He feels that this is a not infrequent occurrence. A similar case was reported by Wolfe.

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Read before the Fayette County Medical Society, August 13, 1940.



This concept of the mechanism of spontaneous interstitial emphysema and pneumothorax is supported by the experiments of Macklin. He took mature cats, introduced a cannula into a bronchus, usually the lower right, and forcibly distended the lung. Autopsy showed pneumothorax in some, but a constant finding were bubbles of interstitial emphysema with pneumoperitoneum and pneumoretro-peritoneum. Later he showed by careful fixation and section of tissues that the air from the over distended alveoli follows the perivascular sheaths into the mediastinum.

**SYMPTOMS:** The symptoms of spontaneous pneumothorax are fairly typical. From the history alone one should suspect this condition. The patient may or may not be engaging in physical activity when he experiences a sudden severe pain in his chest. He may or may not collapse from the shock, but continued distress, and difficulty with respiration leads him to seek relief by sitting or lying down. A new position gives little or no relief. The pain may be more severe anteriorly, but is usually referred to the scapular region of the affected side. Occasionally the pain is in the epigastrium. Heart consciousness, and a temporarily affected rhythm may be noticed. Bachmann has pointed out the similarity of this clinical picture with that of a heart attack. The severity of the symptoms parallels closely the amount of collapse which results. In most cases there is a fairly rapid improvement in the condition of the patient as regards his respiration and circulation.

**PHYSICAL SIGNS:** The classical physical signs are readily elicited where there is a marked collapse. Expansion on the affected side is restricted. The percussion note is hyperresonant, tactile fremitus diminished, and the breath sounds are feeble or almost absent. The heart and mediastinal structures are shifted away from the affected side. In the less severe cases the physical signs are less conclusive. A diminution of the breath sounds on the affected side is the most definite finding. Absence of a friction rub in the presence of this type of pain is suggestive.

Blackford reported fifteen cases of spontaneous pneumothorax in the male student body of the University of Virginia. His incidence was roughly one case per 1000 male students per session. Our experience at the University of Kentucky is comparable to this.

#### CASE REPORTS

**CASE 1.** 3-16-33, M. M., male, 19, white, a track man at the University, was suddenly seized with shortness of breath while running around the track. On physical examination his heart was displaced to the right. Breath sounds were absent at left base. Diagnosis of spontaneous pneumothorax, left side, was confirmed by x-ray. Mantoux negative. No history of recent illness. This student made a complete recovery and was later admitted to the Marine Corps.

**CASE II.** 5-14-37, M. V., male, 23, white, had a sudden severe pain of his left shoulder and spine while writing on the blackboard. Spontaneous pneumothorax on the left side was suspected and confirmed by x-ray. Mantoux test negative on two occasions. No history of recent illness.

**CASE III.** 12-12-36, J. E., male, 25, white, engaging in a boxing match. After the match he spat up a little blood, which may have come from his mouth rather than his chest. He was taken to his room that night feeling pretty well beaten up. Dr. J. S. Chambers saw him in his room for two days following. An x-ray was made on the third day, when he was thought well enough to move. The collapse was massive on the side of his most severe blow.

This student had experienced considerable nasal difficulty. A year before this accident Dr. George Doyle removed a polyp from his nose which proved to be non-malignant on histological examination. His Mantoux was positive, and an x-ray taken eighteen months before the present illness showed primary infection, with possibly some reinfection, not very recent. He made a good recovery. This, we must consider as traumatic in origin.

**CASE IV.** 10-19-37, J. L., white, male, 21, had acute pain in right upper chest. The symptoms were not especially severe. X-ray showed a partial collapse of his right lower lobe from a spontaneous pneumothorax.

The patient had reported to the health service three weeks previously because of a cough. At that time he was found to have high pitched breath sounds and musical rales throughout both lungs. It was interpreted as being an asthmatic condition. He had a negative first strength P. P. D., and a positive second strength. X-ray showed some primary infection of both lungs, probably recent. Subsequent roentgenogram showed apparently complete

expansion within a month, and all was well until he went home for the Christmas holidays. When he returned 1-3-38, he reported again with pain in his chest. Again he was found to have a pneumothorax on the same side. At this time he dropped out of school and was treated elsewhere.

He was contacted recently and reports that he is well. He has had several check-up X-rays since leaving school, none of which showed pulmonary pathology.

CASE V. 12-16-38, H. M., white, male, 20, came in because of a cough and "pleurisy pain" of a few days duration. Physical examination revealed numerous rales over both lungs. No friction rub was heard over the region of pain. X-ray showed an unsuspected partial collapse of the right upper lobe. The Mantoux was negative. Two weeks before this he had been treated for an upper respiratory infection. Recovery was prompt. Complete expansion had taken place in four weeks. Follow-up after a year was negative for chest pathology.

CASE VI. 5-3-39, M. R., white, male, 18, was walking home from school at an ordinary pace when he experienced sudden pain in his left shoulder. This was not very severe, and he continued on his way. He came in the following morning still having pain. Physical examination showed diminution of breath sounds and spoken voice at the left apex. X-ray showed partial collapse of the left upper lobe. He had been treated eleven days before for acute follicular tonsillitis. His Mantoux test was negative.

CASE VII. 5-5-39, O. S., female, white, age 58, employed as a maid at the University, for five or six days had noticed a slight pain under her right scapula. On the morning of her first visit she was attempting to awaken her 24 year old son with not much success. She then jerked the covers back and spanked him rather severely. It was then that she experienced a sharp stabbing pain as though she had been shot in the anterior right chest at the level of the fourth rib. She was able to walk to the kitchen and sit down, but had marked difficulty in breathing. She was definitely dyspnoeic and had a fairly definite greyish cyanosis. Our first impression was that she might be having a heart attack. Physical examination showed her heart to be normal except for some displacement. The breath sounds were markedly diminished and there was hyper-resonance over the right chest. X-ray showed

a massive collapse of the right lung, with some displacement of the heart to the left. Twenty-six days after the onset, there was still a small amount of air at the right apex. Six weeks after the onset, expansion was complete.

She gave a history of an identical attack some years ago, but no x-ray was made at that time.

CASE VIII. 3-1-40, T. D., male, white, 19, was studying when he noticed a sensation of tightness in his chest, slight pre-cordial pain, and a sensation of "things going upward." He was conscious of some shortness of breath. When he came to us two days later there was hyper-resonance, and the breath sounds were distant at the left base; x-ray showed a small amount of collapse of the left lower lobe. Fourteen days later another x-ray showed that most of the air had been absorbed.

Another picture at two months showed complete absorption of air.

For a week preceding this event he had had a slight cough, but no evidence of fever. His Mantoux was negative.

CASE IX. 4-27-40 B. G., male, white, age 19, was walking up some steps when he had a sudden sharp pain in his left shoulder. He did not report for examination until two days later. The pain was hard to define and localize. There was some pain on deep inspiration. Physical examination revealed some limitation of motion on the left side. The breath sounds were only slightly subdued. X-ray showed a small amount of air in the left pleural cavity. Three days later there was a little further collapse, but from that time on absorption of the air was progressive. In September, 1939, his Mantoux was positive and an x-ray of his chest showed a small amount of primary tuberculosis, but no secondary infection.

CASE X. 6-25-40, W. C., white, male, age 30, came in to have his heart examined. About two months previously he had become conscious of a "snapping sound" and a vague discomfort in his chest. This sound was audible to him and to others. He was examined by two physicians elsewhere who told him that he had a pericardial adhesion and confined him to bed for two weeks. There was no known cause for a pericarditis at the time. He improved and came to the university summer school. The snapping sound recurred, but only when he was in certain positions. There was slight pain in his left shoulder.

Upon first examination no cardiac lesion



could be detected. The rhythm and rate were normal and no adventitious sounds were heard. On a second visit he still complained of some pain, and insisted that he could hear the "snapping" at times. An x-ray of his chest revealed a small amount of air over the left apex. He was then tried in various positions in an attempt to produce the snapping sounds. In a semi recumbent position the sounds were faintly audible without the aid of the stethoscope, and were quite loud when heard through the stethoscope. The sounds were quite similar to that produced by rubbing two inflated rubber balloons together, or by pinching and allowing the fingers to slide over a rubber balloon. The diagnosis of interstitial emphysema and a small pneumothorax on the left was made. He gave a normal electrocardiographic tracing.

**TREATMENT:** In practically all cases rest is the only treatment necessary. Some writers have advocated two weeks in bed, and some only one week. Our policy, in general, was to keep the patient, with a lesser amount of collapse, in bed for a week, and then if expansion were taking place the patient could be up but not allowed to take vigorous exercise. The cases showing massive collapse were restricted longer.

It has been recommended in cases of complete collapse with embarrassment of respiration, that air be aspirated from the pleural cavity. This may be a life saving measure in the rare cases of bilateral pneumothorax, and with pneumothorax in the newborn.

**DISCUSSION:** Regarding this condition, the writer had always accepted the simple thesis of some rupture of the pleural surface resulting in air entering the pleural cavity. The elasticity of the lung caused collapse, and in some cases a valve-like tear might result in air entering on inspiration, but being trapped upon expiration. Thus a positive pressure might actually result. With the accumulation of our cases, the ones showing only a partial collapse made this mechanism seem doubtful. Why, if there is a break in the pleural surface, should not the lung collapse completely? Some of the references already quoted gave the theory of interstitial emphysema of the lungs resulting in air following along the perivascular sheaths and finally breaking into the pleural cavity. This theory seemed rather complicated, and somewhat far fetched. Even the ex-

periments of Macklin might be open to question because of the method used, i. e., the over inflation of a single lobe. The trauma of introducing a catheter might cause an abrasion of the bronchial mucosa which might allow the air under pressure to penetrate the tissues. The lack of the cushion effect of the other lobes which were not inflated might obscure the true process.

With these questions presenting themselves we decided to attempt to produce pneumothorax experimentally in animals. In order to eliminate the objectionable features mentioned and to duplicate as nearly as possible the normal physiological process of respiration, we carried out the following scheme.

**EXPERIMENTAL:** Rabbits, guinea pigs, and rats were tried, but mature cats proved most satisfactory for use. The cat was anesthetized with soluble barbiturate or avertin injected rectally. X-ray of the chest was then taken with proper exposure for showing lung detail. Tracheotomy was performed and a smooth cannula tied in place. The cat was placed in a decompression chamber with a tube connecting the trachea with the outside. Air was withdrawn from the chamber by means of a suction pump and the amount of reduced pressure observed on a manometer. After exposure to reduced pressure for one minute the animal was removed from the chamber and an x-ray made. If there were no sign of pneumothorax, or evidence of pneumoperitoneum, it was again placed in the chamber and exposed to a greater reduction of pressure. This was repeated until pneumothorax resulted, or other evidence of extravasated air.

The first few animals we tried were exposed to too great a reduction of pressure. For example, a rabbit with pressure lowered 10 c. m. of mercury promptly showed swelling of the abdomen. Autopsy showed the peritoneal cavity distended with air. There was a rent in the diaphragm. Both lungs were completely collapsed, and inflation revealed several points of rupture of the lower lobe pleurae.

With the first few animals it seems that direct rupture of the pleural surface was sometimes found. The presence of bubbles about the heart and mediastinum, subcutaneous emphysema and retroperitoneal air, however, was striking. Using cats and with a more careful graduation of pressure, we got less complete collapse of the lungs

but often with marked extravasation of air in the tissues.

Typical results were observed in a cat. This animal was subjected to 2 c. m. mercury reduction of pressure for one minute without positive evidence of pneumothorax. Another exposure of 2 c. m. pressure reduction produced swelling of the abdomen, but no evidence of pneumothorax by x-ray. After a 3 c. m. reduction of pressure, pneumothorax was demonstrated on the right side. The animal also showed a large amount of air in the retroperitoneal space.

Another cat gave us interesting observations. After 6 c. m. reduced pressure there was a marked collapse on the right side, and a pocket on the left. Subcutaneous emphysema was marked, extending up into the neck. The abdomen was markedly ballooned out. Incision showed no air in the peritoneum, but a large amount in the retroperitoneal space. Upon opening of the thorax, the outer layer of the pericardium was filled with air bubbles. One of these was punctured when the sternum was removed and a sucking in and out of air was observed with respiratory efforts of the cat. The pleura in the cat is relatively loose as it reflects over the mediastinum, and this was undermined by air. No surface rupture of the lung was seen.

That air may take this same route in the human being is verified by case X, and by those cases reported by others. DeCosta reported four cases of pneumothorax in the newborn. One baby showed, in addition, subcutaneous emphysema, mediastinal emphysema, and pneumoperitoneum. Another showed bullous mediastinal emphysema. It is in no way mysterious that this should happen when one considers the changes of pressure in the chest cavity with respiration, and the stretching and relaxation of the lung structures that result. Indeed, air is an ideal dissecting agent under these conditions, and may be expected to follow the structure most cleavable.

**SUMMARY:** Ten cases of spontaneous pneumothorax have been observed in the health service at the University of Kentucky since 1933. Nine occurred during the last four years. One of these must be attributed to trauma, and one gave a diagnostic sign of accompanying interstitial emphysema.

Recovery was prompt and uncomplicated in all cases. In one there was a recurrence.

The Mantoux test was positive in three cases, negative in five and not done in two. There was no evidence of active tuberculosis in any of these cases.

All of the patients except one were young adult males. The only female was an older woman. The student body ratio of male to female at the University is about two to one.

Four of the cases had experienced some recent upper respiratory difficulty or a slight cough.

Pneumothorax was produced experimentally in animals by over distention of their lungs with a respirator-like apparatus. Accompanying mediastinal emphysema, pneumo-retroperitoneum, and other collections of extravasated air are the rule in these animals.

The mechanism of spontaneous pneumothorax is apparently not always the same in the human being. There is positive evidence that it may be by: (1) rupture of a congenital bullus, an emphysematous bleb, or some pathological condition of the pleura, or (2) by the rupture of alveolar lining resulting in air traveling along the perivascular sheaths and finally gaining access to the pleural space from the mediastinal pleura.

The writer is indebted to Dr. J. S. Chambers of the Department of Hygiene and Public Health of the University of Kentucky for about half of the case reports. For the experimental work, I am indebted to students Marshall Guthrie, George Orsborn, and Robert Hamilton. The ingenuity and enthusiasm of these three made this modest experimental effort possible.

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Carrots and alfalfa are vast sources of vitamin A for any national emergency, reports Dr. Harold M. Barnett of the Barnett Laboratories, Long Beach, Calif., to the American Chemical Society. Vitamin A is essential to normal vision. It occurs in fish and palm oil, but fish must be caught and palm oil must be imported. Methods have now been developed which make it possible to extract carotene from carrots directly into bland vegetable oil in potencies up to 10,000 units per pound without the usual expensive drying and dissolving. Abundance of low-cost vitamin A concentrates from fish oils has made it impractical to place these newer methods into large scale production. However, vitamin A in the form of carotene may now be produced at lower costs. Ten thousand acres of carrots grown up under proper conditions will yield 20 trillion units of vitamin A.



## INFLUENCE ON PUBLIC HEALTH PROGRESS OF INADEQUATE MEDICAL SERVICES IN THE RURAL POPULATION

CHAS. B. CRITTENDEN, M. D., DIRECTOR,  
DIVISION OF MATERNAL AND CHILD HEALTH,  
KENTUCKY STATE DEPARTMENT OF HEALTH,  
LOUISVILLE.

The title of this paper suggests two questions: First: Are there inadequacies in medical services in the rural population? Second: Do these inadequacies affect public health progress in this population?

In seeking answers to these questions, it is well to determine what constitutes adequacy and to measure existing medical facilities against reasonable standards. Dodd and Penrose, who have discussed this subject at length in their volume entitled "Economic Aspects of Medical Service," are disposed to regard medical service as reasonably adequate:

1. When, in the opinion of qualified experts in public health service and sanitary engineering, preventive and sanitary services intended to diminish the incidence of disease and injury to the whole population are developed to the state of maximum efficiency, i. e., to the point at which curative and other services to all individuals by private or other practitioners become more efficient in preventing damage and more economical of professional personnel and equipment than additional public preventive work.

2. When, in the opinion of qualified practitioners who have knowledge of the persons concerned, curative services and other individual treatment by private or other practitioners are available and obtainable to the whole population at need, in the amounts and variety which are necessary or prudent in reducing prospective damage to the person of the patient.

3. When additional services for the comfort and convenience of patients—beyond those needed in the reduction of damage—are available and obtainable to the whole population, in accordance with the medical and dental habits and customs of the people.

These standards, the authors are frank to state, are only intended to serve as an expository device against which to contrast particular deficiencies of medical care.

From time to time, over a period of many years, the Kentucky State Department of

Health and the State Medical Association have collected data relating to various aspects of the practice of medicine in this State. The materials used in this paper are almost entirely taken from data collected from these studies. The facts found and the conclusions drawn will no doubt apply, to greater or less degree, to other Southern States as well as to Kentucky.

This does not mean, however, that Kentucky is typical of Southern States in all of its aspects, as the following description of the State indicates:

Kentucky is south of the corn belt, although she grows some corn; she is north of the cotton belt, although she grows some cotton; she does not belong to the wheat belt, dairy belt, or any other specific agricultural belt. Yet, on the other hand, she is not an industrial State. There is some fruit, but she is not a fruit raising State. She has some of the richest land and some of the poorest in the nation. She gains much of her income from distillation of whiskey, growing of tobacco and the promotion of horse racing.

Kentucky though, does have some common characteristics with the South in that her population is predominantly rural and agricultural, and that her standing in the Nation's economic list is low. Only five States in the Union, all Southern, have a per capita income less than Kentucky.

POPULATION: Any consideration of questions relating to the absence or presence of medical facilities must, a priori, be based upon a knowledge of the general population—its geographical distribution and its composition status as to age, sex and race. Kentucky's 2,614,589 population is divided as follows: (1930 Census)

23% in the 13 cities with 10,000 or more population, 8% in the towns of 2,500 to 10,000 population, 69 % rural.

The population is predominantly native born white. The foreign born and negroes together, making up 9% of the total population, with but few exceptions, live in the large cities.

In common with other States and with other countries, Kentucky's population is aging. From 1890 to 1930, the percentage of total population in the age groups 0 through 24 decreased somewhat more than 2%. On the other hand, the percentage of total population in the age groups past 45 increased 7 %.

Women of C. B. A. for the State as a whole make up 22% of the total population. The rural white group comprise more than one-half of the total C. B. A. group.

PERCENTAGE OF WOMEN OF CHILD BEARING  
AGE BY RACE AND POPULATION BREAKDOWN

	Percent of Total Population
Urban White	5.04%
Rural White	15.05%
Urban Negro	0.95%
Rural Negro	1.17%
Total	22.21%

The largest percentage of babies continue to be born in rural areas where the medical facilities are poorest. The high birth rate in the rural areas, therefore, has direct bearing on the need of medical care in these areas, because it is in the age group 0 to 1 that the hazard of life is greatest.

**ECONOMICS:** Adequacy of medical facilities is favorably or adversely affected by the economic status of a community; particularly is this true of the supply of physicians. In determining the State's economic status, some of the common economic indices are used. The median per capita assessed valuation of the State for the year 1938-1939 was \$474.00. The total assessed valuation between the fiscal years 1931-1932 and 1938-1939 has decreased in the rural areas 16%, and in the urbanized counties, 14%.

Twenty-nine counties of the State had a per family income of less than \$500.00 per year. A total of 64, or more than one half of the counties of the State, had a per family income of less than \$700.00. These counties of low income are all in the rural section. The per capita income of the State as a whole in 1938 was \$294.00.

Only 31% of the Federal income tax returns for 1937 were from the rural sections of the State; 69% were from the urbanized counties.

To these facts it may be added that approximately 50% of Kentucky's 1930 population lived on farms, and that between the years 1930 and 1935 the farm population had an increment of nearly 134,000 persons. The tenant farm population in Kentucky in 1935, however, was only 37% of the total farm population, as contrasted with 42% in the United States as a whole. In a few counties of the State, chiefly in the eastern section, there is coal mining. Eighteen percent (18%) of the wages paid in the State in 1937 was paid in connection with this occupation.

In the immediately preceding sections have been briefly described the population concerned in the use of medical facilities and the factor influencing the distribution of these facilities in the State—the economic status.

The sections following deal with the medical and auxiliary facilities that are present in the rural areas.

**PHYSICIANS:** In Kentucky, as of July 1, 1939, there were 2,236 physicians in active practice. This number does not include health officials or those restricting their services to institutions, etc. More than one-half of the total number of physicians are general practitioners.

Forty-six percent (46%) of the physicians in Kentucky are concentrated in the 13 cities which represent only 21% of the total population. The rural areas, representing 69% of the total population, have only 54% of the total physicians.

The number of physicians in Kentucky has not kept pace with the growth of the general population. There has been a decrease in the actual number of physicians since 1910. In the United States as a whole, the relationship between population growth and physicians has maintained and is maintaining about an equal level.

Although the total number of physicians in Kentucky has decreased, the number in the cities has increased. This means that the rural areas have suffered a great decrease in supply of physicians. For the State as a whole there are 8 physicians per 10,000 population; for the cities, the rate is 15 per 10,000 population, and for the remainder of the State, 6 physicians for each 10,000 persons.

When the population of the counties is grouped into certain broad population classes, it is seen that the concentration of physicians varies inversely with the density of the population. The one exception in Kentucky is the population class group, 10,000 to 14,999. It has less density of population than the immediately succeeding group, yet has fewer persons per physician. (Table I, Population and number of physicians in Kentucky by size of county population, 1930 U. S. Census, Physicians, October 1, 1939).

The ratio of physicians per person for the State as a whole is 1 to 1,169. In New York State and in California the ratio is one physician to slightly more than 600 persons. For the United States as a whole the ratio is one physician to each 780 persons.

In no section of the State, rural or urban, does the number of persons per physician approach the relationship in California or New York State, and in only one population group does it approach that of the United States as a whole.

**HOSPITALS:** The distribution of hospitals in the State follows very closely that of the physicians. (Table II, Population and



TABLE I  
POPULATION AND NUMBER OF PHYSICIANS IN KENTUCKY  
BY SIZE OF COUNTY

(Population - 1930 U. S. Census)			(Number of Physicians - Oct. 1, 1939)			
Size of County	Number of Counties	Population	Percentage of Total Population	Number of Physicians	Percentage of Total Physicians	Number of Persons Per Physician
Under 5,000	3	12,739	0.48	6	0.27	2,123
5,000 - 9,999	26	214,658	8.2	131	5.74	1,639
10,000 - 14,999	33	406,951	15.6	275	12.48	1,480
15,000 - 19,999	24	401,289	15.3	241	10.93	1,665
20,000 - 29,999	15	358,224	13.7	230	10.44	1,557
30,000 - 39,999	8	284,059	10.9	209	9.48	1,359
40,000 - 49,999	5	218,027	8.3	194	8.80	1,124
Over 50,000	6	718,642	27.5	918	41.65	783
TOTAL	120	2,614,589	100.0	2,204	99.99	1,186

TABLE II  
POPULATION AND NUMBER OF GENERAL HOSPITAL BEDS IN KENTUCKY  
BY SIZE OF COUNTY

(Population - 1930 U. S. Census)				(Number of Beds - Aug. 16, 1939)			
Size of County	Number of Counties	Population	Percentage of total Population	Number of Hospitals	Number of Beds	Percentage of Total Beds	Number of Persons Per Bed
Under 5,000	3	12,739	0.48	1	12	0.26	1,062
5,000 - 9,999	26	214,658	8.2	2	47	1.03	4,567
10,000 - 14,999	33	406,951	15.6	8	143	3.12	2,846
15,000 - 19,999	24	401,289	15.3	13	405	8.84	991
20,000 - 29,999	15	358,224	13.7	13	558	12.18	642
30,000 - 39,999	8	284,059	10.9	12	376	8.21	755
40,000 - 49,999	5	218,027	8.3	7	463	10.11	471
Over 50,000	6	718,642	27.5	16	2,576	56.24	279
TOTAL	120	2,614,589	100.0	72	4,580	99.99	571

number of hospital beds in Kentucky by size of county population. Map of distribution of hospitals in Kentucky by county.)

Kentucky has 72 general hospitals, with a total of 4,580 beds. These hospitals are located in 50 counties; 70 counties being without general hospital facilities. Sixty-five percent (65%) of the hospital beds are in the 13 cities. The three largest cities, representing one-sixth of the State's total population, have approximately 50% of the total beds. The remaining five-sixths of the State's population has only one general hospital bed for each 1,036 persons. The greatest distance, measured from the county seat, to the nearest hospital is 88 miles, and in many sections of the State the distance is greater than 50 miles. In the sections most remote from hospitals, the highway systems are the most poorly developed.

**AUXILIARY FACILITIES:** Laboratories, nurses and X-ray facilities are also concentrated in urban centers. Eight counties have no registered nurses and 20 counties have one nurse each. In 13 of these the only nurse is the public health nurse who is part of the county health department.

**EXISTING CONDITIONS AND NEED FOR MEDICAL FACILITIES:** Certain criteria have been used in attempting to measure the extent to which medical services are used in the State, and it has been noted:

(1) In a large portion of the State, facilities do not exist for giving medical services; (2) that in other sections, facilities exist only to a limited extent; and (3) in the urbanized sections, medical facilities are present and services are given with a reasonable degree of adequacy.

Studies have been made to measure conditions existing in rural sections of the State as to the need of physicians.

In 25 counties, largely situated in the eastern and southeastern part of the State, 40% or more of the births are attended by midwives. In this group of counties there is approximately one physician for each 2,500 persons; obviously a disproportionately large number of persons per physician.

A search of the Vital Statistics records was made to find out by whom death certificates were signed, the number not signed by physicians and the cause of death given, if any. Counties having an adequate supply of physicians were used as controls in measuring differences existing between the two groups of counties. Briefly, the findings were that in the group of 25 counties mentioned above, from less than 1% to 79% of the death certificates were not signed by physicians. These percentages are in marked contrast with 5 counties chosen as having fairly adequate medical services. Even in this group, however, there is one county with a surprisingly large percentage of death certificates not signed by a physician. This is accounted for by the fact that a considerable part of this county is difficult to reach, being rough and mountainous and with poorly developed roads or none at all.

With a view of determining whether or not inadequate care was due to inadequate medical facilities, the child health conference records in a typical rural county were studied. For the most part, the economic level of this county, as measured by the per family buying income, is about average; but the rate of physicians is about half of that of the State as a whole. Data were taken from the records as to the number of mothers receiving prenatal care.

There was information on 90 mothers who were delivered by physicians. Approximately one-half of them had no prenatal care. Ten of them had prenatal care for 9 months and two others for 7 months. Information was not available as to whether or not this care was adequate. Fifteen women had an indeterminate amount of prenatal care—that is, it was so insignificant that it made no impression on the mother.

Of the total records studied, the percentage of deliveries made by each doctor listed, shows the 90 cases to be fairly representative of the county's mean number of births, which was 210 per year for the past five years.

Thirty-eight other records in this county were studied of women delivered by midwives. Of these, 6 received a minimum

amount of prenatal care from physicians.

**INFLUENCE ON PUBLIC HEALTH PROGRESS:** Medical facilities in Kentucky have been described above to show that inadequacies exist in the rural population. Now we must turn to the second question—Do these inadequacies affect public health progress?

Public health progress may be described as an expansion and intensification of accepted public health programs now in existence. To this may be added in the future those activities and procedures that lend themselves to mass application. This statement applies not alone to the science of medicine and the allied sciences, but to the field of engineering as well.

By and large, health departments, both State and local, were established to meet emergencies that threatened the life and health of large parts of the population. Yellow fever and cholera, no doubt, were largely responsible for the establishment of more State Boards of Health than all other reasons put together.

The frantic appeals of the people to the science of medicine for protection bore fruit both in the organization of State and local health machinery. Long after the fear of massive epidemic diseases had subsided in this country, came the establishment of the first county health department in the United States. This was in Jefferson County in 1908. This department was organized as a result of the necessity for intensifying efforts against the transmission of bovine tuberculosis. This particular program became so heavy that the transition from a part-time unit to full-time automatically followed.

The foundation of public health work in Kentucky is the county health department. It is the agency which brings together the services of the physicians in the recognition and cure of disease and also it is the agency which combines with them in the prevention of disease.

Today Kentucky has 86 full time county health departments. These departments have been established in those sections of the State having the greatest need of medical care and public health work. The 25 counties, in which 40% or more of the deliveries are by midwives and in which as high as 79% of the deaths were not attended by physicians, have 22 health departments. Only three of these counties are without health departments and these three have had full time health departments from time to time, but for economic reasons have had to discontinue them.

It is true that all of these 22 health de-



partments are under-staffed. It is equally true that this entire group of counties is lacking in those facilities that would make for reasonably adequate medical services. As an example, the inadequacy of service in the field of maternal care is cited. In 1938 live births in these counties totaled 12,283. Of this number, 58% were attended by midwives who were wholly untrained and who could, in the very nature of things, have received but little actual supervision and training. In the same year and in the same counties, 6.9% of these mothers received prenatal medical supervision through the county health departments, and only 1.4% received postpartum medical examinations by the county health officers.

Progress in public health activity cannot be made until there can be made available to these mothers medical services that, in part at least, conform to the definition of adequacy that has already been given.

It has been stated that public health work has been organized to promote the health of the people. The question immediately arises—if there is not adequate medical service to make people well, how can the health departments perform their duties of prevention of illness and promotion of good health.

It is generally accepted that one of the fundamental functions of public health is to control communicable disease. Through the restriction of the infected individuals to their homes by means of quarantine, the source of infection is diminished and liability of spread is lessened. Any health department is seriously handicapped in its proper efforts to control contagious diseases unless the cases are reported promptly and fully. Therefore, in counties with an inadequate supply of doctors the occurrence of communicable disease cannot possibly be fully reported.

It is true that part of the health department could function without medical services. The abatement of nuisances within a community is not dependent on the medical services within that community. Certain phases of sanitary hygiene could progress without medical aid. Food and drug inspection or water supply improvement might be done seemingly independent of medical facilities. But of what good is any of this prevention to persons who are ill. The health department seeks to deal with a well population which may be informed or educated as to ways of staying well.

In considering the study of death certifi-

cates which were not signed by physicians, it may be said that if a doctor was not present at such a dramatic event as a death, it is much less likely that the individual was attended by a physician during fatal illness. This also means that the cause of death given on the certificate was provided by a member of the family, neighbor or undertaker. Because of this source of information, obviously the correct cause of death is not always given. A part of our public health program is based on the interpretation of the number of deaths from specific causes. If the error of listing number of deaths by cause is great enough, the application of some of our public health procedures may be wrong. The magnitude of such a problem is indeterminable; however, it is deserving of the consideration of public health administrators.

It is interesting to note that, as the number of physicians decreases with the size of the population group, the public health nurses and sanitarians increase. In other words, where medical facilities are least accessible, public health personnel increases per unit population. Is this saying that public health work has of necessity been organized where there are inadequate medical services? If this be true, has the work of these health departments departed from the functions which they were set up to perform because of a lack of curative medical facilities in these counties?

#### FAYETTE COUNTY AS AN EXAMPLE OF PUBLIC HEALTH PROGRESS WHERE THERE IS ADEQUATE MEDICAL SERVICE

Fayette County in Kentucky, is cited as an example of a rural population with adequate and accessible medical service. In this community public health work has progressed. In 1937 this county received the National Chamber of Commerce first award for progress of public health in a rural community.

The total rural population of this county as of 1930 was 22,807. (19,117 white and 3,690 negro).

Economically the county is far above the average in the State. The income per family is \$2,319. Because of this high economic status the county has adequate medical supplies which are accessible to the persons within the area. The rate of physicians is 14.4 per 10,000 population, and the ratio of physicians to individuals is one physician to 696 persons. The two general

hospitals have a total of 397 beds, which is one bed for approximately every 170 persons. Auxiliary facilities are also adequate.

In such an area the health department may function according to definitions commonly accepted for public health work, and may carry on a routine program of a well organized health department.

In Fayette County one hundred percent of the school children have received vaccination against smallpox. According to the 1938 annual report, approximately 70% of the county's total population have been successfully vaccinated. Seventy-five percent of the preschool children have received the approved dosage of diphtheria toxoid.

Sixty-five percent of the school children have received the approved dosage of typhoid vaccine.

During 1937, 273 expectant mothers received some sort of antepartum care, either field or clinical. This represents 55% of the total births recorded.

Tuberculosis cases are readily reported because of available hospital facilities in the county. In 1938, 148 cases were admitted to the hospital. Taking that many persons, who are spreaders of tuberculosis, out of circulation among the population, will necessarily lower the incidence of the disease.

It has long been recognized that many of the county's people are financially unable to acquire medical and hospital services. The setup of the service for the medically indigent is briefly:

When a call is received by the health department, certain information is obtained as to the economic status of the patient, the doctor he desires, and the type and duration of the illness. The case is then referred by the health department to the physician.

Patients not ill enough to require home medical service are referred to the medical relief center, which is manned by voluntary physicians.

Hospital cases are referred to the local hospitals by (1) physicians who attended the cases for the health department in the home, (2) ambulatory relief center, and (3) health department clinics for maternal cases. Emergency cases are admitted and investigations made later.

The physicians chosen to participate in the home service submit a statement to the health department each month. These statements are initialled as approved and

transmitted to the county auditor for payment. The same procedure of payment is used for the hospitals, which are paid on the basis of the patient day and also for the druggist.

A prescription for drugs is referred first to the health department for approval and then to the druggist chosen for this service.

In the past three years, approximately 2,200 people per annum received medical care in this county. Of these 615, or 28 percent, required hospitalization.

The indigent medical and hospital care plan has the approval of the Fayette County Medical Society and the State Medical Association, and is in accord with the current policies of the American Medical Association. It is quite obvious that such a plan as outlined above would not work unless the supply of physicians and hospital facilities were adequate.

#### SUMMARY

1. Sixty-nine percent of Kentucky's population is rural. One-half of the total population live on farms.

2. Only 5 States, all Southern, have a per capita income less than Kentucky. Moreover, it is true that the bulk of Kentucky's wealth is in the 13 cities.

3. Although there has been a decrease in the total number of physicians in the State since 1910, there has been an increase in the number in the cities. This means the rural areas have suffered a loss in the supply of physicians.

4. Auxiliary medical facilities are concentrated in the cities. Sixty-five percent of the general hospital beds are in the 13 cities. There are 70 counties without general hospital facilities of any kind.

5. In many areas of Kentucky, medical facilities are inaccessible either because of distance or the economic status of the population.

6. In 25 counties, which have inadequate medical facilities, there is a large percentage of deaths not attended by physicians. Forty percent or more of the births in these counties are delivered by midwives.

7. Public health departments were first established to meet emergencies that threatened the life and health of large parts of the population. Protective measures were set up to prevent disasters which attacked the mass of the people.

8. Where medical facilities are least accessible, the number of public health nurses and sanitarians per unit of population is greatest.

9. Fayette County in Kentucky is cited



as an example of a rural population which has adequate and accessible medical service and which has made recognized progress in public health work.

#### CONCLUSIONS

1. Inadequacies of medical service are adversely affecting public health progress in the rural population.

2. The medical facilities are in direct relationship with the economic status of an area. Where medical facilities are least accessible, public health personnel has increased per unit of population.

3. The appalling number of deaths not attended by physicians in certain counties raises the question of specific causes of death being correctly recorded.

4. For the departments of public health to perform their duties of prevention of illness and promotion of good health, they must deal with well persons. For control of contagious diseases there must be prompt and full reporting by physicians. With an inadequate supply of doctors the occurrence of communicable disease cannot possibly be fully reported.

#### PROBLEMS IN HEMATOLOGICAL DIAGNOSIS

LOUIS HAMMAN, M. D.

Baltimore, Maryland

During the past four or five years I happen to have seen in my practice and at Clinical Pathological conferences an unusually large number of puzzling cases of disease of the blood. The fact that clinicians so often have great difficulty in coming to a precise diagnosis in this field seems to me rather surprising. I recall that in the early years of my practice the diagnosis of diseases of the blood gave us little difficulty or concern. That a patient had anemia was obvious from the blood count and the only problem that remained was to decide whether it was primary or secondary anemia, a decision usually reached very easily by a careful study of blood smears stained with Ehrlich's triple stain and the estimation of the color index of the red corpuscles. As for leukemia, that diagnosis was readily made by the white cell count and the differential enumeration of the component leucocytes. The matter that arouses astonishment is the fact that with the intensive study of disease of the blood that has been pursued during the past twenty years the diagnostic problems have grown apace. This is es-

pecially true of leukemia. Typical examples are easy to recognize but as our knowledge has extended we encounter more and more atypical cases, cases with normal or low leucocyte counts and little alteration in the character of the leucocytes or such alterations as are not typical of leukemia. Therefore at present we must depend for diagnosis upon the general clinical manifestations of the disease as much as upon the blood picture. It is my purpose tonight to bring these matters pointedly to your attention by discussing some of the difficult and interesting cases to which I have referred.

From the standpoint of diagnosis the anemias now offer little difficulty. This is in great measure due to the fact that a descriptive diagnostic category has been adopted depending upon the size of the red corpuscles and their hemoglobin concentration, namely, macrocytic or microcytic anemia and hyperchromic or hypochromic anemia. These designations serve a very useful purpose but only a temporary purpose and will give way to a more satisfactory classification as our knowledge of the cause and pathogenesis of the anemias become more complete. Every physician knows that the disease still spoken of as pernicious anemia is something more than a macrocytic, hyperchromic anemia and that the peculiar anemia which frequently comes on in women at the menopause is something more than a microcytic, hypochromic anemia. As an example:

CASE 1. A woman 77 years of age entered The Johns Hopkins Hospital, March 13, 1938, complaining of anemia and weakness. Four years before the patient had begun to notice progressive weakness. She considered this due to her age and did not consult a physician until a year before her admission when it was found that she had a profound anemia. She had been treated energetically for pernicious anemia with little if any improvement. Finally transfusions had to be resorted to keep her blood at a reasonable level. During the three or four months before entering the hospital the weakness had become more pronounced and in addition there had been shortness of breath. The patient was a sparely nourished woman, remarkably preserved for her age. The only conspicuous feature on physical examination was the pronounced pallor. A number of the cervical glands were easily palpable but none of them much enlarged. The blood

count was hemoglobin 50 percent, red blood corpuscles 1,730,000, leucocytes 3,500. The mean corpuscular volume was 129, the mean corpuscular hemoglobin 41. Only one nucleated red cell was seen. The reticulocytes numbered five per thousand red cells. The differential count of the leucocytes was normal. The gastric contents showed an abundance of free hydrochloric acid. A very thorough investigation failed to reveal any other abnormality. Shortly before admission to the hospital a slightly enlarged lymph node had been removed from the neck and microscopic examination of the gland had demonstrated tuberculosis. Following discharge from the hospital patient was kept under observation by her physician who recently reported that her condition remained unaltered. In spite of the continued use of liver by mouth and parenterally there had been no improvement in the condition of the blood. She had been kept alive by repeated transfusions.

It must be emphasized that the diagnosis of pernicious anemia does not depend alone upon the peculiar change in the blood. Equally important are other characteristic features, namely, achylia gastrica, papillary atrophy of the tongue, certain neurological abnormalities, and a response to the administration of liver. In this patient the blood picture was precisely as it is in pernicious anemia but there was an abundance of free acid in the gastric secretion, there was no papillary atrophy of the tongue, the findings of the neurological examination were normal, and there was no response to treatment with liver. Therefore there are essential differences between the two forms of anemia which set them apart as independent diseases. Cases similar to this are uncommon though not rarities. They have been described under the title of achrestic anemia but their nature is not understood.

For many years pathologists have recognized two forms of purpura hemorrhagica or thrombocytopenic purpura. In one form, study of the bone marrow reveals a large number of megalokaryocytes indicating an extravagant production of platelets; therefore it is assumed that the disease is due to a rapid destruction of platelets in the circulating blood. In the other form, there is no evidence in the marrow of increased platelet production, indeed megalokaryocytes are scanty and difficult to find; therefore it is assumed

that in these instances the disease is due to faulty platelet formation. The distinction is somewhat similar to that between pernicious anemia and aplastic anemia.

A case presenting some difficulty in diagnosis was the following:

CASE 2. A German laborer, 51 years of age, entered The John Hopkins Hospital, October 12, 1935, complaining of an eruption over the body. In 1913 he had come to the Medical Clinic of the Out-patient Department complaining of an eruption which had followed the appearance of a chancre. The eruption was a characteristic syphilitic efflorescence and the Wassermann test was positive. He received four injections of arsphenamine and failed to return for further treatment.

Upon admission to the hospital he reported that during the intervening years he had been treated irregularly by his family physician. He had been well until one month before when a spotty reddish eruption had appeared over the body. At the same time he had had pain in many joints, had lost weight rapidly and had become short of breath.

He was in good general condition, apparently not very ill, in spite of obvious loss of weight and pronounced pallor. Numerous petechial spots were present over the trunk and extremities and many larger purpuric areas. Pinching the skin caused an ecchymosis to appear. The superficial lymph nodes were easily felt but only a little enlarged. The liver extended to a point three fingerbreadths below the costal margin. The spleen was large and firm.

After admission to the hospital there was bleeding from the gums. The tourniquet test was decidedly positive. On the fourth day in the hospital there was gross hematuria. The stools gave a strong reaction for blood. On the twelfth day the patient vomited a large amount of blood. Shortly after he became comatose and the results of the neurological examination indicated that hemorrhage into the brain had occurred. He died later on the same day.

The blood count was as follows: Hemoglobin 7.8 gms., Red blood cells 2,720,000, White blood cells 2,150, Platelets 61,000, Volume packed cells 25, Mean corpuscular volume 92, Mean corpuscular hemoglobin 29, Mean corpuscular hemoglobin concentration 31.

Differential Count: Polymorphonuclear Neutrophils 83%, Polymorphonuclear Eosinophiles 1%, Lymphocytes 13%, Monocytes



3%, Bleeding time 40 minutes.

Smears: Red cells normal in size and form. No reticulocytes. No nucleated red cells. No abnormal forms of leucocytes.

Wassermann reaction: Positive.

Blood Chemical studies: Normal.

The diagnostic possibilities considered were chiefly aplastic anemia and purpura hemorrhagica, most observers favoring aplastic anemia. However, although there was no evidence of red blood corpuscle regeneration, the differential leucocyte count (83% polymorphonuclear neutrophils) was an important point against aplastic anemia. Moreover, whereas hemorrhage is common in aplastic anemia, such profuse bleeding as occurred in this case is rare.

A brief summary of the post-mortem findings is as follows:

The liver was normal in size and grossly normal in appearance. The spleen was greatly enlarged, greyish red in color, with prominent Malpighian bodies. The lymph nodes were little if any enlarged. The bone marrow was dark red in color, certainly not aplastic. Microscopical examination disclosed a great number of megalokaryocytes in the bone marrow and spleen demonstrating clearly that there had been during life overproduction of platelets, probably in response to their rapid destruction in the circulating blood. The cause of this platelet destruction is unknown but it has long been supposed that the spleen plays an important part in the process and the observation that removal of the spleen may be curative, lends strong support to the view. All cases of thrombocytopenic purpura are not cured by splenectomy. When operation is being considered a study of the bone marrow obtained by puncture or biopsy may help in reaching a decision. The cases with few megalokaryocytes in the marrow have a bad prognosis under any form of treatment.

A year ago I had an experience which for me was unique.

CASE 3. A woman, 54 years of age, entered The Johns Hopkins Hospital October 27, 1938, complaining of bleeding from the gums and hemorrhages into the skin. Gums had bled a little for years and she had always bruised rather easily. Two weeks before admission a large subcutaneous hemorrhage appeared spontaneously over the left arm. Following this many purpuric spots of varying size occurred beneath the skin and in the mucous membranes of the mouth and conjunctivae.

There was bleeding from the gums and the day before admission hematuria began. During the two weeks blood counts had been normal except for a low platelet count. In spite of several transfusions the bleeding continued and the platelet count fell steadily. On the day before admission to the hospital no platelets could be found in the circulating blood.

The patient was in excellent condition although very apprehensive. The physical examination was entirely negative except for splotches of purpura over the skin and beneath the mucous membranes of mouth and conjunctivae. The urine was grossly bloody. The blood count showed: hemoglobin 18 gms.; red blood corpuscles, 6,200,000; platelets 23,000. At the end of two days the urine became clear. No further ecchymoses appeared. The platelets gradually rose. At the end of five days they were 122,000, at the end of ten days 250,000. From then on uneventful convalescence.

Never before had I seen thrombocytopenic purpura begin so threateningly and subside so promptly and innocently. Under observation, during the course of two weeks the platelets had fallen to zero, then had begun to rise slowly and in ten days again had reached a normal number. This brief incident, the sudden destruction of platelets and their prompt restoration, certainly suggested the operation of some substance poisonous to the platelets or the platelet forming cells, which had entered the body and destroyed the circulating platelets or temporarily suppressed their formation, and then had been rapidly excreted. One of the internes described a similar occurrence he had observed which had been thought to be due to taking sedormid. The patient was questioned and in reply said that in the past she had taken sedormid occasionally but only rarely. She had taken a dose a few weeks before the large ecchymosis had appeared upon the arm and a second dose after its appearance.

A review of the literature discloses that about forty similar cases have been reported, the first by Denning in 1933. Purpura may occur after taking the first dose of the drug; it may come on after having taken the drug regularly for some time; or, what is more common, a patient will take the drug for a long time with no ill effects, then, after a period of abstinence, develop purpura following a single dose. The complete similarity of this condition to granulocytopenia following, for instance, the use of pyramidon is apparent.

As I have said our main difficulty in hematological diagnosis is in the recognition and differentiation of the leukemias. There are three types of leucocytes in the blood distinct in origin, in form and in function, namely, granulocytes, lymphocytes, and monocytes. In adult life the granulocytes arise from cells in the bone marrow; the lymphocytes from the lymph nodes and from lymphoid tissue scattered throughout the body; the monocytes from the reticulo-endothelial cells. In their mature form these cells may be distinguished readily by their appearance and staining properties; but the immature forms can be differentiated only with difficulty and uncertainty. Supravital staining methods are helpful but the only certain criterion of differentiation is to study the movements of the living cells as has been described by Lewis and Rich.

For the purpose of discussing the differential diagnosis of leukemia it is convenient to divide cases into three groups.

1. Those in which leukemic manifestations come late in the course of a long illness.

2. Those in which certain clinical manifestations are suggestive of leukemia but which in the end turn out not to be leukemia.

3. Those in which the diagnosis remains uncertain throughout the clinical course. In some of these even after the postmortem examination a precise diagnosis cannot be made.

GROUP 1. Cases with leukemic manifestations coming on late in the course of a long illness.

CASE 4. November 23, 1937, I saw at Washington, with Dr. Lewis C. Ecker, a man 73 years of age who had been taken ill about two months before with a little fever and the symptoms of heart failure, shortness of breath, swelling of the liver and dependent edema. The heart had rapidly increased in size and on one occasion a pericardial friction had been heard. The symptoms had gradually subsided and when I saw the patient the heart was but little enlarged and the manifestations of passive congestion had subsided. During this period the blood had been examined frequently and on each occasion had been reported as normal. The patient felt well enough to be out of bed and was eager to resume his accustomed work. A little after I had seen him he began to spend two or three hours a day at his office. However, the improvement was short-lived. Soon he began rapidly to lose weight and strength

and a low grade fever returned. Late in February he went to Florida. Shortly after arriving he had a large hemorrhage from the bowel. A blood count made at this time revealed that the leucocytes numbered 55,000 and that a large proportion consisted of myelocytes. The spleen had become easily palpable. On March 2 the patient died and the body was brought to Washington where an autopsy was performed by Dr. J. W. Lindsay.

The postmortem examination disclosed the characteristic changes of myeloid leukemia. There was typical leukemic infiltration of the liver, spleen, adrenals, kidneys, pancreas and lymph nodes. The pleural layers and the pericardial layers were densely adherent and when separated the surfaces were found to be studded with firm white nodules which on microscopical examination were composed of compact masses of cells, myelocytes predominating.

The case is interesting from a number of standpoints. In the first place the diagnosis was obscure. The remarkable changes in the size of the heart, clearly demonstrated in successive roentgenograms, and the symptoms of heart failure could be interpreted only as evidence of pericardial effusion. But it was a puzzling matter to decide what had been the cause of the pericardial effusion. Tuberculosis pericarditis seemed to be the most likely supposition. Leukemia was not even thought of until late in the course of the disease when characteristic changes of leukemia appeared in the blood. If we assume that the illness was leukemia from the beginning then it is a remarkable fact that the first clinical symptom of the disease was pericardial effusion. Under somewhat similar circumstances it is often contended that the late leukemic manifestations are a complication and do not imply that the preceding illness was due to leukemia. The autopsy findings certainly support the view that the pericardial effusion had been due to leukemic infiltration of the pericardium.

The following is a case similar in many ways but without autopsy confirmation.

CASE 5. A man 68 years of age consulted me December 13, 1938 complaining of discomfort and pain in the abdomen. He had always been subject to respiratory infections which were called colds and grippe. On August 14, 1938 he had been taken ill with one of his periodic respiratory infections. An unusual feature of this attack was pain across the chest which persisted and gradually moved down over the abdomen



until it became localized in the lower part of the abdomen. From that time on he had never been without pain. He described it as a dull nagging pain which only occasionally became sharp. He had lost his appetite and had become weak and exhausted. He expressed it by saying that in four months he had become a tottering old man. He had been a little constipated. In October he had been very thoroughly examined by an excellent clinician who could find no evidence of any organic abnormality. The patient was admitted to The Johns Hopkins Hospital for a thorough study.

He was a tall lean man only a few pounds below his accustomed weight. The general physical examination was entirely negative. All of the laboratory tests, particularly a thorough review of the gastrointestinal tract, were negative. I had feared that the patient might have carcinoma of the colon but the examination lent no support to this view. Since no evidence of organic disease appeared during the four months he had been ill I concluded that the symptoms must be due to functional causes and advised a period of rest away from home. He went off to Florida. A letter from his wife dated February 8, spoke of some improvement in the digestive symptoms but added that the patient was still very weak. A second letter, written February 26, reported that the improvement had vanished and that he was suffering more than ever from nausea and inability to eat. From then on he grew steadily worse. At the end of March he started for home but on the way became desperately ill. He reached Washington March 25, was admitted to hospital moribund and died the following day. Dr. C. R. Huffman, who attended him at the hospital, tells me that at this time the blood showed the characteristic changes of leukemia.

This patient had been ill for seven months. At the end of two months a thorough investigation, including a blood count, had revealed no abnormality. A second examination, made two months later, had been equally negative. The blood count again had been normal. Gradually he had lost strength and weight and on the last day of life the blood had shown the typical features of leukemia. Are we justified in considering this illness to have been leukemia from the beginning or are we to regard it as some undiagnosed disease with terminal manifestations of leukemia? Without the information autopsy would have yielded, the question must remain unanswered. Nevertheless, having in mind

the previous case, we are permitted at least to entertain the view that the illness throughout was an unusual manifestation of leukemia. A doubt that recurs constantly to mind is whether the blood examinations reported on two occasions as normal were indeed normal. Might it not be that a more careful study of the leucocytes would have revealed abnormal forms not customarily found in the blood? Had the studies revealed such abnormal forms the course of events would have been more in accord with usual experience.

GROUP 2. Cases with clinical manifestations suggestive of leukemia but which turn out not to be leukemia.

CASE 6. A physician, 46 years of age, entered The Johns Hopkins Hospital February 6, 1936 complaining of chills and fever. He had always been a strong, healthy man until June 1935 when he developed soreness about the rectum. Examination revealed hemorrhoids and an ulcer in the rectum. On August 29, 1935 he had been operated upon. Two days after operation he had developed a pulmonary infection which was diagnosed as pneumonia. At that time the leucocyte count varied from 1000 to 2000 with a low granulocyte count and the red corpuscles were 3,700,000. After leaving the hospital he had rested quietly at home and slowly improved although he did not fully regain his strength. The leucocytes numbered from 1,800 to 4,500, the polymorphonuclear cells being usually in the neighborhood of 40 per cent. Early in January he had had a chill followed by fever up to 104 degrees. From then on he had a chill each afternoon, the temperature rising thereafter to from 103 to 104 degrees. The leucocyte counts during the three weeks before admission to The Johns Hopkins Hospital had averaged about 1,500. He had gradually become weaker and more and more prostrated.

I shall not record the details of the examination. You may be assured that the clinical investigation was thorough. I will state only the important findings. The patient was a robust, overnourished man, evidently very ill and somewhat apprehensive. The general physical examination revealed nothing abnormal except scattered wheezing rales over the lungs, which the patient said had been present for many years, and a few fresh and fading petechial spots over the arms and abdomen.

The patient died March 24, 1936, six and a half weeks after admission. During this period of observation the temperature had ranged irregularly from 98 degrees to

104.6 degrees and he had had frequent afternoon chills. Many blood transfusions had been given. Progressively he had grown more and more prostrated and from time to time had been delirious. Shortly after admission an abscess had appeared in the left buttock which had rapidly spread. It had been opened and had drained profusely. Later a similar abscess had developed in the right buttock. Physical examination had not changed. Lungs had remained clear, except for coarse rales. Spleen never had been felt. There had been no glandular enlargement.

The blood counts may be summarized as follows: hemoglobin 9 to 13 grams, red corpuscles 2.7 to 3.6, white corpuscles 600 to 3,200, platelets 200,000.

Differential Counts: Polymorphonuclear neutrophils 43 per cent, lymphocytes 45 per cent, eosinophiles 2 per cent, monocytes 6 per cent, myeloblasts 2 per cent, megakaryocytes 2 per cent.

The cells classed as myeloblasts had an extremely deep blue cytoplasm, so dark that the nucleus was ill-defined. There were no granules, the cells classed as megakaryocytes were enormous in size with a round, greyish-blue nucleus, fine chromatin and several nucleoli. Many of the nuclei were lobulated. The cytoplasm stained a greyish-blue and contained a moderate number of coarse dark blue granules.

This patient presented great difficulty in diagnosis. The three conditions chiefly considered were an obscure infection, Hodgkins disease, and leukemia. At the end Hodgkin's disease was selected by most observers as the probable diagnosis. The result of the postmortum examination, disclosing widely disseminated tuberculosis, was entirely unsuspected.

Before the surprise and embarrassment excited by this case had disappeared another patient entered the hospital with somewhat similar symptoms but the course of the disease had an altogether different outcome.

**CASE 7.** A young woman, 25 years of age, entered The Johns Hopkins Hospital July 11, 1936 complaining of fever and anemia. She had always been well but usually a little anemic and often ecchymoses had appeared in the skin after slight bruising. Many of her teeth had become abscessed due, it was thought, to having received in youth many blows to the mouth while playing hockey. During November 1935 all of her teeth had been extracted and a few days after the last extraction she had been taken ill with what had been called

"glandular fever." A week later she had become deeply jaundiced. These symptoms had soon subsided but thereafter she had continued to have a little fever at intervals, particularly after excitement or exertion. From January 1936 to July she had felt fairly well and had been able to work eight hours a day and also to engage moderately in social activity.

About July 1, 1936 she had noticed that she was tiring easily and sleeping poorly. The temperature was taken and disclosed that she had a low fever. A blood count revealed decided anemia. The temperature rose quickly to higher levels and she had grown weaker and more and more prostrated.

The patient was in a vivacious, excited state, laughing, joking and talking incessantly. Evidently she was very apprehensive and had the appearance of being very ill. There was pronounced pallor. A few petechial spots were seen in the conjunctivae. The cervical lymph nodes were a little enlarged. The edge of the spleen was two fingerbreadths below the costal margin.

The temperature on admission was 101 degrees and that evening rose to 105 degrees; then it fell slowly and reached normal ten days later. The patient left the hospital August 4, 1936, twenty-five days after admission apparently well although the blood count was not yet normal.

The blood count on admission was as follows: hemoglobin 6.2 gms.; red corpuscles 1,900,000; leucocytes 1,200.

The blood count on discharge was as follows: hemoglobin 14.2 gms.; red corpuscles 4,720,000; leucocytes 5,400. A representative complete examination was the following made on July 17, 1936: hemoglobin 10 gms.; red corpuscles 3,500,000; leucocytes 1,800; platelets 74,000; volume packed red corpuscles 30.1; mean corpuscular volume 86; mean corpuscular hemoglobin 27; mean corpuscular hemoglobin conc. 33.

Differential Count: Juvenile neutrophils 3 per cent; segmented neutrophils 9 per cent; eosinophiles 3 per cent; young lymphocytes 12 per cent; mature lymphocytes 21 per cent; adult lymphocytes 9 per cent; lymphoblasts 6 per cent; monocytes 36 per cent. Among the cells classed as monocytes about one-half were very large cells, resembling epithelioid cells, similar to those seen in the blood of the previous patient.

August 18, 1936, two weeks after having left the hospital, the patient returned saying she had been well since discharge un-



til the day before when a little fever recurred. On admission to the hospital the temperature was 100 degrees. The following day it was normal and thereafter remained normal. The spleen was barely palpable. The blood count was as follows: Hemoglobin 13.4 gms.; red corpuscles 4,550,000; leucocytes 5,250.

Differential Count: Juvenile neutrophils 30 per cent, segmented neutrophils 18 per cent, eosinophils 8 per cent, basophils 1 per cent, young lymphocytes 9 per cent, adult lymphocytes 30 per cent, monocytes 4 per cent. During the past three years the patient has been seen at intervals and has remained well.

The situation when the patient entered the hospital seemed to be a very serious one and I was surprised and delighted when prompt recovery occurred. I do not know now what to name the illness. Leukemia and Hodgkin's disease are eliminated as possibilities by the prompt recovery and by the fact that the patient has remained well during the three succeeding years. The clinical features differ from those of granulocytopenia and the lack of conspicuous enlargement of the lymph nodes, the profound anemia, the leukopenia, make it difficult to reconcile this clinical picture with the diagnosis of infectious mononucleosis.

GROUP 3. Cases in which the diagnosis remains uncertain throughout the clinical course.

CASE 8. A white boy, 16 years of age entered the hospital August 30, 1938 complaining of soreness in the ribs and elbows, fever, enlarged lymph nodes in the neck, elbows and groin. Nine months before he had noticed enlargement of the lymph nodes in the neck. Three months before the right elbow had become swollen. A month before admission the lymph nodes at the elbows and in the inguinal regions had become enlarged. During the week preceding admission there had been tenderness over the lower part of the chest and any pressure on the ribs had been very painful. For a month or longer he had had fever, temperature rising to 100 degrees each afternoon.

The patient was a well nourished boy lying quietly in bed in no distress and apparently not seriously ill. There were a number of enlarged lymph nodes on the right side of the neck and a somewhat larger node above the left clavicle. Both epitrochlear nodes were palpable and the inguinal nodes were easily felt. The lymph

node enlargement however was in no way conspicuous. There was pronounced tenderness over the lower ribs and over the sternum. The edge of the liver was felt at the costal margin; the edge of the spleen 3 fingerbreadths below the costal margin. The blood count on admission was: hemoglobin 12.6 grams; red blood corpuscles 4,620,000; leucocytes 1,850. The differential count showed only 20 per cent polymorphonuclear neutrophils. During the five weeks the patient was observed in the hospital anemia gradually developed although it was never pronounced, perhaps on account of the numerous transfusions that were given. The leucocytes at first varied between 1,000 and 2,000. Later they fell to 300. The number of granular cells gradually diminished so that the last differential count showed only 5 per cent polymorphonuclear cells, the remaining cells being lymphocytes. A lymph node was removed from the neck and a microscopical diagnosis of lymphosarcoma was made. Four weeks after admission the patient began to complain of pain and discomfort in the rectum. No mass could be felt on digital examination. From then on the patient's condition rapidly grew worse, he complained constantly of pain in the rectum and the hemorrhoids which were present on admission became red and inflamed. At this time blood cultures yielded a growth of bacillus pyocyaneus. A little later the patient became jaundiced, he grew rapidly more and more prostrated, and died of pulmonary edema on October 8, 1938, a little over five weeks after admission to the hospital.

It is needless to point out how very confusing was the clinical picture in this patient. He had been ill for months with fever, weakness and glandular enlargement. One of the lymph nodes removed from the neck had shown the characteristic microscopical picture of lymphosarcoma. However the clinical manifestations were not all like lymphosarcoma and it seemed impossible clinically to accept this diagnosis. The blood showed only a moderate degree of anemia and there were no nucleated red cells. The platelets were abundant. There was no tendency to bleeding. The patient did not show changes in the mouth which occur so commonly in acute forms of leukemia. The leucocytes were gradually reduced in number with a great reduction in the granular cells but there were no immature forms in the blood as usually occur in leukemia. The blood picture certainly suggested granulocytopenia. The infec-

tion about the rectum and the pyocyaneus septicemia, which was the final cause of death, seemed to be late development, a terminal infection rather than the cause of the disease. The diagnosis chiefly favored was aleukemic leukemia although the unusual features of the blood were obvious. These features were clearly those of granulocytopenia and yet the diagnosis of granulocytopenia seemed insufficient in view of the changes found in the lymph node removed from the neck, which were the changes of lymphosarcoma or leukemia.

The autopsy disclosed no evidence of leukemia. There was no conspicuous enlargement of any of the lymph nodes, but many slightly enlarged lymph nodes were removed for microscopical examination and they were all normal in appearance. None of them showed any changes even suggestive of lymphosarcoma or leukemia. The spleen was moderately enlarged and was typical of the acute splenic tumor accompanying infection. In the rectum there was a deep ulcer and no doubt the pyocyaneus septicemia had come from this area of infection. The bone marrow was normal except that the granular leucocytes were absent. In the lungs and kidneys there were areas of infection filled with bacteria about which no leucocytic reaction had occurred.

In a word the autopsy demonstrated the characteristic lesions of granulocytopenia. This condition is sometimes associated with pyocyaneus infections but in this instance whether a chronic pyocyaneus infection had been the cause of the granulocytopenia, or an acute pyocyaneus septicemia had occurred as a terminal event in a patient with granulocytopenia from some other cause, cannot be decided. The one extraordinary fact about the autopsy is that in spite of careful search no abnormality in the lymph nodes could be discovered. This was astonishing since in the cervical nodes removed during life there were unmistakable changes, changes characteristic of lymphosarcoma or lymphoid leukemia. The sections of these nodes were examined again and they undoubtedly did show the lesions previously described. A careful check of material sent to the pathological department at the time the cervical nodes removed by biopsy had been received made it seem altogether unlikely that misplacement or confusion of specimens had occurred. Is it possible that the development of lymphosarcoma had begun in the cervical nodes and that at operation all the nodes involved had been re-

moved? The question remains an enigma.

CASE 9. A 41 year old carpenter was admitted to The Johns Hopkins Hospital March 28, 1935, complaining of an infected left eye. Two years before following the extraction of several teeth he had bled profusely for six days. Two months later more teeth had been extracted and again he had bled for four or five days. In July 1934 a papule had appeared on the neck which had gradually grown larger and had been accompanied by redness and swelling of the right side of the neck and face. The lesion had been excised and following the excision the patient had bled freely and at the end of three days had become so anemic a transfusion had been given. One week before admission what seemed to be a sty had appeared upon the upper lid of the left eye. The lid had become greatly swollen and there was purulent discharge and photophobia.

The patient was well developed and still well nourished although he had lost weight. The skin and mucous membranes were very pale. The lids of the left eye were greatly swollen and from between the lids exuded a purulent discharge. A few of the lymph nodes in the neck were palpable but there was no general lymph node enlargement. The spleen was not felt. The hemoglobin was 50 per cent; the red corpuscles 2,500,000; the leucocytes 5,000, of which 15 per cent were polymorphonuclears, 30 per cent lymphocytes, and 55 per cent large mononuclear cells at first thought to be myeloblasts but later identified as monocytes.

Two weeks after admission the patient had a profuse nose bleed. The following day a bit of tissue was removed from the left conjunctiva for microscopical examination. After the operation the wound bled freely and it was difficult to control the hemorrhage. From then on there was recurring bleeding from the conjunctiva. A precise diagnosis could not be made from the tissue removed. There was infiltration with polymorphonuclear cells and with large round cells designated as macrophages.

The patient left the hospital May 27, 1935 and during the following six months reported regularly at the Out-patient Department. Gradually he became more and more anemic. The leucocytes varied in number from five to six thousand. The proportion of monocytes varied but averaged 30 per cent. In November an eruption of superficial crusted areas appeared in the skin. One of these lesions was removed and on



microscopical examination showed perivascular infiltration with small round cells and large mononuclear cells. The dermatologists classified the lesions as leukemic infiltration. The later part of November an abscess developed in the left upper jaw, a loose tooth fell out and from the cavity came a free discharge of pus.

The patient entered the hospital again December 2, 1935. The left side of the face was red and swollen and very painful and tender. The eye lids were swollen as they had been on the first admission and the conjunctiva was greatly thickened. The left cornea was cloudy. There was one enlarged lymph node beneath the ramus of the jaw on the left and the axillary and inguinal nodes were easily felt. The liver extended 5 centimeters below the costal margin. The spleen could not be felt. The blood count was: hemoglobin 65 per cent; red corpuscles 3,800,000; leucocytes 5,800; platelets 60,000. The differential count of leucocytes showed that 60 per cent of the cells were monocytes. Two weeks after admission the leucocyte count began to rise, thereafter varying between 20,000 and 30,000. Extensive necrosis of the jaw developed, the patient became progressively weaker and died of exhaustion on December 31, 1935.

The autopsy revealed only a little enlargement of the lymph nodes and spleen. The bone marrow was somewhat hyperplastic but certainly not decidedly so. There was no gross leukemia infiltration of the organs. The left sphenoid sinus contained a green grey necrotic mass which extended into the retrobulbar tissue. The right sphenoid sinus and the adjacent sinuses were also infected with necrosis and destruction of the bony partitions. Microscopically the exudate contained a large number of mononuclear cells and a few myelocytes. Accumulations of these same cells were found in the blood stream, in the sinuses of the lymph nodes, in the spleen, in the bone marrow and elsewhere. These large round cells were identified as monocytes by their motion.

This case is interesting and unusual since it is difficult to classify it even after having completed the postmortem examination. Clinically it had the appearance of a local infiltration of the sinuses and conjunctivae with terminal infection. There were none of the usual manifestations of leukemia except the changes in the blood. The autopsy findings are certainly not those of leukemia and the pathologists thought the disease could not possibly be

called leukemia. They were unwilling to classify it as belonging to any accepted category and the final anatomical diagnosis was Peculiar Monocytosis with cell infiltration in conjunctivae, sinuses of the lymph nodes, bone marrow and spleen.

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#### IN MEMORIAM

DR. W. G. DAILEY

Millersburg

Dr. W. G. Dailey, 81, retired physician, died July 3 at his home in Millersburg after an illness of several months. Dr. Dailey was the oldest practicing physician in Bourbon county at the time he retired several months ago. He had practiced in Millersburg for 41 years. He was one of the founders of the Bourbon County Medical Society and served as its first president more than 30 years ago.

The society voted Dr. Dailey an honorary membership when he retired from active practice. He was a Fellow of the American Medical Association.

He was born in Owsley county the son of the late Mr. and Mrs. Samuel Cecil Dailey. He was graduated from the Louisville Medical College and practiced medicine in Booneville and Jackson before coming to Bourbon county. He was a member of the Millersburg Masonic Lodge and the Millersburg Presbyterian church.

He is survived by his wife; a daughter; a son; one brother, Dr. M. H. Dailey, well known Paris dentist; three sisters. Dr. J. S. Dailey, Lexington dentist, is a nephew.

Funeral services were held Saturday afternoon, July 5, at the Millersburg Presbyterian church with Dr. J. W. Clotfelter and the Rev. A. D. Houghlin officiating. Burial was in the Millersburg cemetery. Members of the Bourbon County Medical Society were honorary casketbearers.

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#### DR. WILLIAM CALVIN USSERY

Paris

Dr. William Calvin Ussery, 80, retired Paris physician, died on May 3 at his apartment in the Bourbon Hotel in Paris. He had been in poor health for several years and had been seriously ill a little more than a week.

Dr. Ussery was a native of Anna, Ill., the son of the late Martin V. and Elizabeth Misenhimer Ussery. He studied medicine at Cincinnati and practiced in St. Louis several years. He came to Paris and entered practice in 1896. He was active until about six years ago when he retired because of failing health.

Dr. Ussery was a charter member of the Bourbon County Medical Society and was its second president, entering office in 1903. From 1903 until 1930 he served as president five times. After he retired as general practitioner he was

made an honorary life member of the Society. He was a member of the staff of the Massie Memorial since its establishment and after his retirement he was made medical consultant emeritus of the staff. He was also a member of the Masonic Lodge.

Survivors included a daughter, Mrs. M. L. Gunn of Harlan, wife of Dr. Gunn; one sister, Mrs. Agnes U. Ragsdale of Anna, Ill.; two grandchildren, Martha Clark and William Ussery Gunn of Harlan; two stepdaughters, Mrs. W. A. Clark of Dayton and Mrs. Henry T. Judy of Paris and a stepson, J. W. Waller of Washington, D. C.

Funeral services were held at the Hinton-Turner Funeral Home in Paris on Sunday, May 4 with Dr. J. W. Clotfelter officiating. Dr. James A. Orr of Paris conducted the Masonic service. Members of the Bourbon County Medical Society were honorary pallbearers. Interment took place in Anna, Ill.

February 24, 1941, Ensign Gordon S. Maxwell, age 23, of Roanoke, Va., aviation pilot, United States Naval Reserves, lost his life in line of duty when his plane crashed during hazardous dive-bombing practice near the naval base at San Diego, Calif.

Gordon Maxwell typified the very finest in American youth. For this there was a good reason—his fine Christian home. His father, Dr. George M. Maxwell, an eminent physician, a distinguished civic leader, and a poet of more than local renown. His mother, a typical true lady of the south.

Gordon Maxwell was passionately fond of aviation. He loved to soar up into the heavens and wing his way amongst the snow-capped clouds. On one occasion, not long before his last flight, he wrote his mother, "If I ever crash in my plane, don't sorrow for me, for I'll still be flying up in the clouds, laughing down at you and waiting for you."

Of the many fine sentiments set in poetic verse by Dr. George M. Maxwell, the father, probably none ever came so deeply from his soul as the verses, "Our Sky Pilot—G. S. M.," which he composed on the passing of his son. Here it is:

#### OUR SKY PILOT—G.S.M.

They say that he's gone;—  
But I know that he swings  
On up to God's throne  
On His heavenly wings,  
And I hear his clear call  
To the station up there,  
To give him the beam  
That his landing be fair.

They say that he's dead;—  
But I know that he's not;

For the words that he said  
I have never forgot.  
"If I crash in my plane,  
Do not sorry for me,  
For I'll fly on again  
Through the heavens," said he.  
"When you're crying down here,  
(Maybe doubting God's Love),  
I'll be laughing up there  
In the heavens above;  
And some day, when you come  
In your plane, soon or late,  
I'll be waiting, close home  
At the Heavenly Gate."  
So I feel, every night  
As I look at the stars,  
That I see him in flight  
Around Venus and Mars,  
And on out into space  
Through the Pleiades, (seven),  
With a smile on his face,—  
A Sky Pilot of Heaven.

#### NEWS ITEMS

Dr. A. A. Shaper, Louisville has returned from a round the globe trip, having served as ship surgeon on the S. S. President Garfield. Dr. Shaper visited numerous hospitals in Japan, China, India, Phillipines, South Africa, and studied their medical problems during his journey.

The New York Post-Graduate Medical School is offering courses in Clinical Medicine for General Practitioners during 1941 and 1942. These courses are designed to help the physician to keep abreast of modern procedures in the diagnosis and treatment of diseases seen in general practice. Some are full-time courses and many are part-time courses especially planned to enable physicians to study special subjects without too much loss of time. A detailed program of these courses and the dates, can be secured by writing to The Director, 303 East 20th Street, New York City.

The United States Public Health Service has a traveling trailer laboratory in Adair County which is fully equipped to make examinations for all types of water and milk borne diseases, and is of great assistance in controlling the present epidemic of Shiga dysentery. This is a very interesting trailer and all the physicians in that neighborhood are invited to come to visit this laboratory. Dr. J. T. Duncan, Columbia, announces that the epidemic is abating.

Dr. L. Carroll English, son of Dr. and Mrs. Carroll C. English, Louisville, began his internship at the Illinois Research and Educational Hospital, Chicago, July 1st.



# Kentucky Medical Journal

Published Monthly By  
THE KENTUCKY MEDICAL ASSOCIATION  
Incorporated

Entered as second class matter October 22, 1906, at the Postoffice at Bowling Green, Ky., under act of Congress, March 8, 1879.

Subscription Price .....\$5.00  
Edited Under the Supervision of the Council

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NEXT MEETING LOUISVILLE

SEPTEMBER 29—OCTOBER 3, 1941

## COUNTY SOCIETY REPORTS

**Bell:** Bell county Medical Society held its monthly meeting on June 20th at the Cumberland Hotel, Middlesboro. There was a good attendance and a paper was read by Dr. H. C. Chance, Cumberland Gap, on Cancer. All members took part in the discussion. We regret to report that Dr. John Brosher, son of Dr. C. K. Brosher, Middlesboro, was killed in an air crash in California in line of duty with the Army.

EDWARD S. WILSON, Secretary

**Fleming:** The Fleming County Medical Society was called to order June 11 by President Bradshaw with the following members present: Drs. Bradshaw, Cummings, Allen, Graham, Gray and Orsburn.

The minutes of the previous meeting were read and adopted.

A number of letters received since the last meeting were on file. The secretary stated the contents of some and read others. They were disposed as follows:

National Medical Council on Birth Control offering literature on Technique of Conception Control for distribution among already over crowded families was considered of no value to them as they did not seek any information concerning the prevention of conception, but rather the services of a physician in due time after conception has taken place.

A letter from the National Physician's Committee was considered really as a solicitation for funds and it was the consensus of opinion that each member make such contribution as he felt inclined, rather than one from the society as a whole.

A letter from the State Department of Health stressing the fact that the amount of Federal funds allocated to Kentucky for the treatment of venereal disease depended upon the number of cases reported; also that drugs are available through the local Health Department for the treatment of those in the lower economic brackets who had contracted a venereal disease or any who come down with pneumonia.

Concerning the letter from The National Foundation for Infantile Paralysis offering to supply appliances for patients needing them as a result of having been a victim of poliomyelitis, the membership preferred to continue the method already adopted i. e., refer these cases to the health department and let it take them to the clinics at Lexington.

Like action was taken in regards to the offer of the Lexington Clinic to conduct a cancer clinic in Fleming County.

The society requested the secretary to accept the offer of the Metropolitan Life Insurance Co.

to mail a copy of Diabetes in the 1940's to each member.

There was some discussion as to the tonsil clinic. The health officer stated that he preferred all cases be admitted to this service only through the recommendation of the family physician, who would state the amount he considered would be a reasonable fee for each individual to pay for the services to be rendered.

There being no further business the society adjourned.

ROY ORSBURN, Secretary

**Henry:** At a meeting of the Henry County Medical Society held on June 12th, present: M. Bell, F. D. Hancock, G. E. McMunn, O. P. Chapman, Owen Carroll; the visiting guest was William Dowden of Louisville.

Norvell Colbert and Mr. Fuqua, from the Farm Security Office attended the meeting in the interest of Medical Aid for farmers to whom they lend money (these are composed of the farmers of the lower financial bracket). The physicians of the Society accepted the proposition made by the Farm Security Board and will try the plan out for one year, starting July 1st, 1941.

They also agreed to pay a Franklin County doctor their agreed fee for attending the Tillett family at Polsgrove, it being a territory more accessible to Franklin County doctors than Henry County doctors.

Drs. McMunn and Maurice Bell were appointed on a committee to draft a schedule of services to be rendered under this contract. Such draft of services will be discussed by the Society at a meeting the last week in June.

The Farm Security Board agreed to add to its Memorandum of Understanding a clause agreeing not to take in persons for a short time when it was evident that they would have a large doctors bill in that time.

Owen Carroll as a committee of one suggested M. L. Morris as treasurer of the funds now on hand and to collect from each member when approved by the Security Board. No definite action was taken as Mr. Morris has not as yet accepted the position.

William Dowden read a paper on Vitamin Therapy which was very instructive and was discussed freely by the members of the Society.

The next regular meeting will be held the second Thursday in September.

E. W. Wyman of New Castle has been called to U. S. Army service and is stationed at Camp Blanding, Fla.

T. Hunt Jones of Eminence has been called to U. S. Marine Service and is stationed at San Diego, Cal.

OWEN CARROLL, Secretary

**Hopkins:** The Hopkins County Medical Society held its regular monthly meeting at the Hospital Thursday evening, July 10.

Guests of the Society were Mr. Jack Whitford, Dawson Springs, and Mr. Raymond Dixon, Outwood.

The program consisted of a presentation by John E. Haynes on the "Diagnosis and Treatment of Varicose Veins." C. H. Foshee presented two cases of fracture of the patella treated by removal.

Besides the guests, those present were: Drs. Haynes, Scott, Garnier, Foshee, Robinson, Salmon, Davis, Moore, Johnson, Whitson, Veal, Morse, Johnson, Sory, Townes, and Corum.

WM. H. GARNIER, Secretary.

**Third District:** The Third District Medical Society met at the Helm Hotel, Wednesday July 16, at 7:00 P. M. Following the dinner W. B. Troutman, Louisville, C. C. Howard, Glasgow spoke on "What Should Kentucky Do For The Tuberculosis Indigent."

J. T. GILBERT, Jr., Secretary.

**Madison:** The June dinner meeting of the Madison County Medical Society was held Thursday evening, June 19, at the Boone Tavern Hotel, Berea. Members and visitors present were: Dr. and Mrs. J. H. Rutledge, Dr. and Mrs. J. D. Farris, Dr. and Mrs. Murison Dunn, Dr. and Mrs. Alson H. Baker, Dr. and Mrs. Wilson Dodd, Dr. and Mrs. Albert Cornelius, Dr. and Mrs. John C. Baker, Dr. and Mrs. Max E. Blue, Dr. and Mrs. D. M. Munnell, Dr. and Mrs. Hugh Mahaffey, Dr. and Mrs. Robert L. Rice, and Doctors Robert Cowley, Kenneth Wright, Ruby Paine, J. A. Mahaffey, R. C. Coomer, N. A. Bailey, and John W. Armstrong.

After dinner the ladies retired to the lobby and the regular meeting was called to order by the president.

All business was dispensed with, and the program was made up of the following: Dr. Kenneth Wright gave a short synopsis of the exhibits at the convention of the American Medical Association. Dr. Ruby Paine gave a short talk on two interesting exhibits, and Dr. Albert Cornelius gave a talk on the general impression of the convention.

Meeting adjourned after short discussions.

The June dinner meeting will be the last meeting of this society until fall.

ROBERT L. RICE, Secretary

**Union:** Dr. Herman Baker of Evansville was the guest speaker at the regular meeting of the Union County Medical Society. He spoke on the actions taken by the House of Delegates of the American Medical Association. The emphasis of the entire meeting was on better nutrition for



the American people, and its importance for National Defense.

The Dentists of Union County were made full members of the society and the name of the society was changed to the Union County Medico-Dental Society.

BRUCE UNDERWOOD, Secretary

#### NEWS ITEMS

The Holland-Rantos Company have been appointed exclusive distributors for Rantex, the newest development for surgical masks and caps, a patented fibre product which is insoluble in live steam, boiling water or common solvents. A magnification of Rantex shows that it is 176 times more protective than a single layer of gauze. As a result, it provides masks and caps which are exceptionally cool, comfortable, light and free from irritating lint or yarn. They are inexpensive enough to be discarded after a single use; yet they can be autoclaved or sterilized.

The Surgeon General of the U. S. Navy has announced that the next examinations for entrance into the regular Navy as commissioned officers in the Medical Corps will be held for Acting Assistant Surgeon (Intern) on October 6, 1941, January 5, 1942 and for Assistant Surgeon on August 11, 1941, October 6, 1941, January 5, 1942.

Dr. Norvin Lee Casper, son of Dr. and Mrs. Misch Casper, Louisville, is interning at St. Joseph's Hospital, Lexington.

Dr. John B. Tye, 60, Barbourville, died June 21st at the Baptist Hospital, Louisville. He was graduated in 1909 from the University of Louisville School of Medicine.

The medical section of the American Life Convention, meeting Wednesday, June 18 in Hot Springs, Va., elected as its chairman Dr. W. F. Blackford of 129 E. Gray, Louisville.

Dr. Charles H. Hunt, 80 years old, who practiced medicine for 48 years at 939 East Main Street, Louisville, died Thursday, July 17 of uremia. Dr. Hunt was a native of St. Mary's, Ontario, and was a graduate of the University of Toronto and the Hospital College of Medicine, Louisville.

Dr. Curtis Lewis Hancock, Lexington, medical officer of the rating board of the Veterans Administration died in Lexington.

Dr. Harry S. Swope, Ashland, former State Representative died at the age of 65.

#### BOOK REVIEWS

MACLEOD'S PHYSIOLOGY IN MODERN MEDICINE—Edited by Philip Bard, Professor of Physiology, Johns Hopkins University School of Medicine. Ninth Edition, 1,132 pages. St. Louis. The C. V. Mosby Company, 1941.

This volume marks the reappearance under Dr. Bard's editorship of one of the standard human physiology texts. The brief period between this and the last edition has been sufficient to antiquate the latter to the extent that many chapters have been completely rewritten and the nine assisting contributors have found much to reorganize.

There is no change in the general purpose of the volume, that is to acquaint students and general practitioners with the newer facts and conceptions in the field of physiology. This it does well. The length of the volume has not been increased for which the authors are to be commended.

MANUAL OF CLINICAL CHEMISTRY, by Miriam Reiner, M. Sc., Assistant Chemist to Mount Sinai Hospital, New York, 296 pages. Interscience Publishers, Inc., New York, 1941. Cloth \$3.00.

This is a small compact volume covering the techniques used in many functional and clinical tests used as the routine at the Mount Sinai Hospital. In addition, the various examinations for vitamins have been gathered together, forming a welcome addition to the more customary examinations.

The rapid growth and the new possibilities in the field of clinical chemistry requires frequent new publications. It would probably be conservative to say that the number of types of examinations in this particular branch of chemistry has doubled in the past ten years. The book itself is of use chiefly to the bio-chemist or the physician who has specialized in clinical pathology.

ESSENTIALS OF DERMATOLOGY, By Norman Tobias, M. D., Senior Instructor in Dermatology, St. Louis University, Assistant Dermatologist Firmin Desloge and St. Mary's Hospitals, Visiting Dermatologist, St. Louis City Sanitarium and Isolation Hospital. 479 Pages, 143 illustrations. J. B. Lippincott Company, Publishers, Philadelphia, and New York, Price \$4.75.

This brief treatise on disease of the skin is splendidly illustrated and places in the hands of the general practitioners and medical students a convenient handy volume. The subjects are discussed in a concise and complete manner. The pathology of each disease is discussed and each subject is described from the viewpoint of the internist as well as the dermatologist. It is convenient in size and readily adapted to the needs of the every day run of medical practice.

AN INTRODUCTION TO DERMATOLOGY, by Richard L. Sutton, M. D., Sc. D., L. L. D., F. R. S. (Edm.) Emeritus Professor of Dermatology, University of Kansas, School of Medicine and Richard L. Sutton, Jr., A. M., M. D., L. R. C. P. (Edm.) Assistant Professor of Dermatology, University of Kansas, School of Medicine. With 723 Illustrations. Fourth edition. C. V. Mosby Company, St. Louis; Publishers. Price \$9.00.

This book intended for students, collegiate and post graduate, contains a review of dermatology sufficient to outline the scope of the specialty beyond provincial boundaries. The illustrations are excellent and splendidly clarify the text. The bibliography has been selected with a view to utility.

It is one of the best and most complete volumes on this subject and should be in the library of every physician as skin diseases have always been an anathema to them. In consulting this book any physician can be guided towards a correct diagnosis.

HEMORRHAGIC DISEASES, Photo-Electric Study of Blood Coagulability by Kaare K. Nygaard, M. D. Former Fellow in Surgery, the Mayo Foundation; Former Assistant Surgeon, the University Clinic, Oslo. Fellow of Alexander Walthe Foundation for Research in Medicine, Surgery and Gynecology. 320 pages, 59 illustrations, price \$5.50. C. V. Mosby Company, St. Louis, Publishers.

With the introduction of the photo-electric principle to the present problems of blood coagulations, a dependable technic has been added to the present situation. The author describes in detail the methods and the applications of photo-electric principle. It is a new subject and well discussed by the author.

THE MASK OF SANITY, An Attempt to Reinterpret the so called Psychopathic Personality, by Hervey Cleckley, B. S., B. A., (Oxon), M. D. Professor of Neuropsychiatry, University of Georgia, School of Medicine, Augusta, Georgia. The C. V. Mosby Company, Publishers, St. Louis.

The present volume is an attempt to present some of these persons as they actually appear in life. No abstract definition and no brief summarizing account of such behavior as theirs can bring to physicians a useful idea of what such patients are in their actual living. This is because, unlike in all the other serious personality deviations, a mask of perfect sanity conceals the real inward state of all persons disordered in this manner. This mask regularly deceives the community, the law courts and, all too frequently, even the physicians who try to understand and give help. If one considers the almost complete lack of means to cope with

this grave and widespread illness, or if one considers the lack of serious general attention it has received in medical research, one is forced to the conclusion that the so-called psychopath stands today as the "forgotten man" of psychiatry.

INTRODUCTION TO PSYCHOBIOLOGY AND PSYCHIATRY, a Text-book for nurses, by Esther Loring Richards, M. D. Sc., Associate Professor of Psychiatry, Johns Hopkins University, Physician-in charge of the Outpatient Department, Henry Phipps Psychiatric Clinic, Johns Hopkins Hospital; Psychiatrist-in-chief Baltimore City Hospitals. C. V. Mosby Company, St. Louis, Publishers, 1941—357 pages, \$2.50.

This concise text represents the fruits of twenty-two years of teaching undergraduate nurses to understand human behavior in relation to the practice of their profession. The Johns Hopkins Training School for Nurses was the first such school to require such instruction as a part of their basic course.

The text presents that view of psychiatry known as the psychobiologic approach, and while directed to nurses especially would be perused with interest by a medical student. Physicians who have not kept up in recent years with the rapid growth of the behavioristic sciences will find here a simple, concise description of major and minor reaction types of psychic pathology.

The freedom from excessive verbiage and the frequent, well-turned although humorous phase are characteristic of an author who is one of the shining lights of the Johns Hopkins Medical faculty. One could hope for a companion volume intended for use in the instruction of young physicians-to-be.

DEPENDABLE MODERN TREATMENT FOR BURNS—By Harold Joe Davis, Safety Engineer, Author of Industrial Hazards of Static Electricity, etc. Member The American Society of Safety Engineers, Bachelor of Science Industrial Engineering. Underhill Press, Beebe, Arkansas, Publishers. Price 50c (All rights reserved).

This is an informative pamphlet on the treatment of burns which would be a valuable addition to any library for anyone who may treat burns or come in contact with them. It consists of nine closely written pages and discusses shock, the cleaning of burns, and the severity and degree of burns. Also gives first aid advice as to what to do in case clothing catches on fire, for eye burns, chemical burns and powder burns. All the modern methods of treatment are briefly and concisely, but adequately discussed. It has a glossary at the end which adds to the value of this pamphlet.





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- ☐ N. Y. State Jour. Med. 1935, 35-No. 11,590—  
“Irritating Properties of Cigarette Smoke as Influenced  
by Hygroscopic Agents.”

- ☐ Laryngoscope, 1935, XLV, No. 2, 149-154—“Some  
Clinical Observations on the Influence of Certain  
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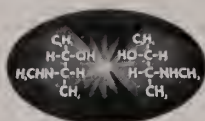
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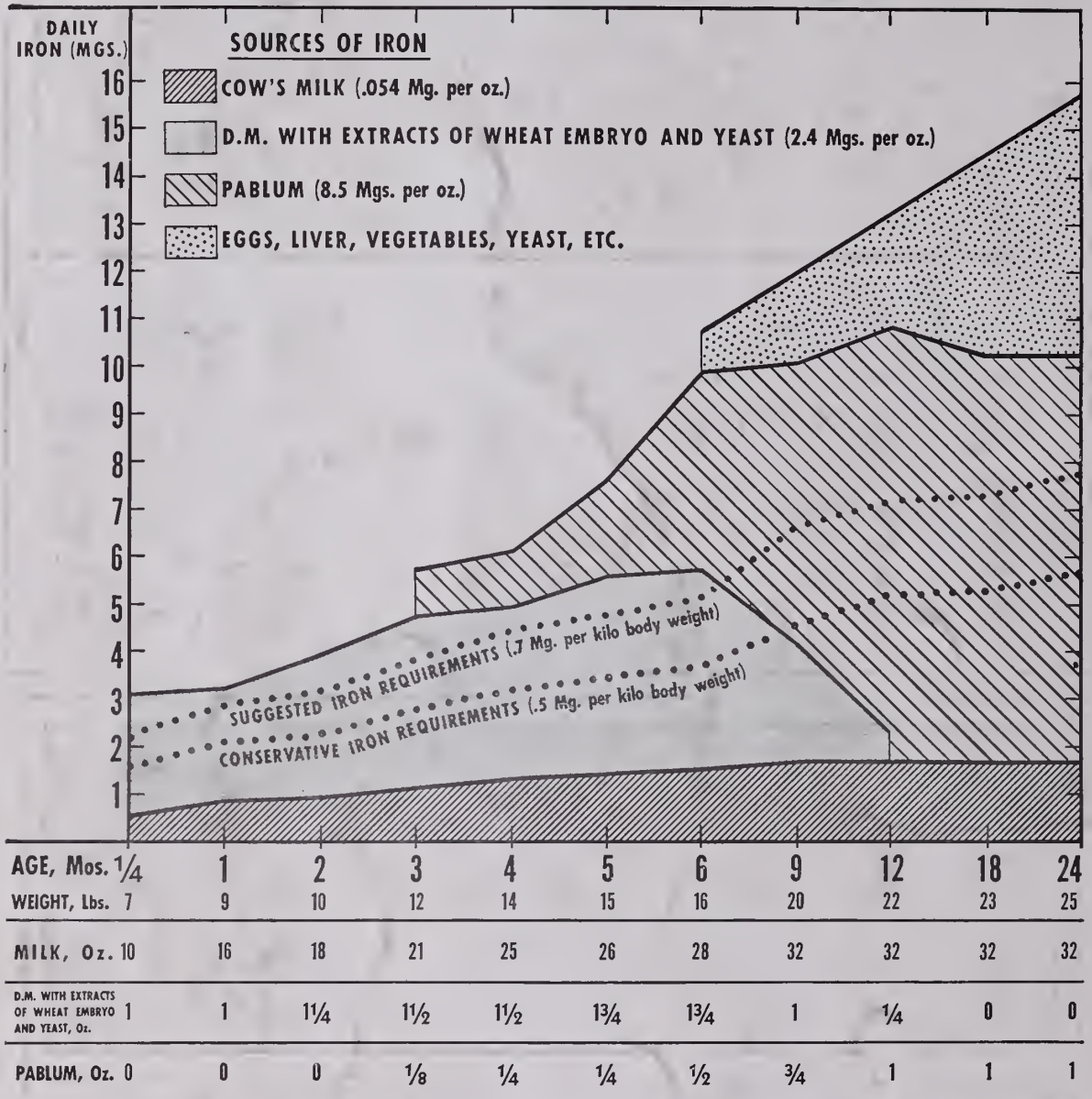
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# KENTUCKY MEDICAL JOURNAL



THE N.Y.A.C.A.  
OF MEDICAL  
SEP 22 1941  
1127 31

Published Monthly by the Kentucky State Medical Association Under the Supervision of the Council

VOL. 39, No. 9

BOWLING GREEN, KY.

SEPTEMBER, 1941

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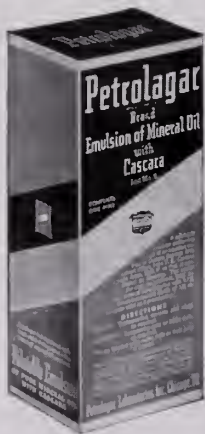
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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph., Gon. & Ven. Dis.*, 23, 201 (March), 1939.

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2	2	2
3	4	4
4	6	6
5	8	8
6	10	10
7	12	12

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Allen.....	A. O. Miller.....	Scottsville.....	September 24
Anderson.....	J. B. Lyen.....	Lawrenceburg.....	September 1
Ballard.....	F. H. Russell.....	Wickliffe.....	September 9
Barren.....	R. E. Hayes.....	Glasgow.....	September 17
Bath.....	H. S. Gilmore.....	Owingsville.....	September 8
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Bourbon.....	B. N. Pittenger.....	Paris.....	September 18
Boyd.....	R. W. Gardner.....	Abingdon.....	September 2
Boyle.....	P. C. Sanders.....	Danville.....	September 16
Bracken Pendleton.....	W. A. McKenney.....	Falmouth.....	September 25
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Breckinridge.....	John E. Kincheloe.....	Hardinsburg.....	September 11
Bullitt.....	George B. Hill.....	Mt. Washington.....	.....
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Greenup.....	L. C. Bate.....	Greenup.....	September 12
Hancock.....	F. M. Griffin.....	Hawesville.....	September 1
Hardin.....	D. E. McClure.....	Elizabethtown.....	September 11
Harlan.....	W. E. Riley.....	Harlan.....	September 20
Harrison.....	W. B. Moore.....	Cynthiana.....	September 1
Hart.....	Maher Speevack.....	Munfordville.....	September 2
Henderson.....	J. Leland Tanner.....	Henderson.....	September 8 & 22
Henry.....	Owen Carroll.....	New Castle.....	September 11
Hickman.....	H. E. Titsworth.....	Clinton.....	September 4
Hopkins.....	Wm. H. Garnier.....	Madisonville.....	September 11
Jackson.....	.....	.....	September 6
Jefferson.....	B. W. Smock.....	Louisville.....	September 1 & 15
Jessamine.....	J. A. VanArsdall.....	Nicholasville.....	September 18
Johnson.....	A. D. Slone.....	Paintsville.....	September 22
Knott.....	.....	.....	September 27
Knox.....	T. R. Davies.....	Barbourville.....	September 18
Larue.....	.....	.....	.....
Laurel.....	Oscar D. Brock.....	London.....	September 10
Lawrence.....	L. S. Hayes.....	Louisa.....	September 15
Lee.....	A. B. Hoskins.....	Beattyville.....	September 13
Leslie.....	John H. Kooser.....	Hyden.....	.....
Letcher.....	F. D. Willey.....	Jenkins.....	September 30
Lewis.....	.....	.....	September 15
Lincoln.....	Lewis J. Jones.....	Hustonville.....	September 19
Livingston.....	J. O. Nall.....	Smithland.....	.....
Logan.....	E. M. Thompson.....	Russellville.....	September 3
Lyon.....	H. H. Woodson.....	Eddyville.....	September 2
McCracken.....	Leon Higdon.....	Paducah.....	September 24
McCreary.....	R. M. Smith.....	Stearns.....	September 1
McLean.....	Allen R. Will.....	Calhoun.....	September 11
Madison.....	Robert L. Rice.....	Richmond.....	September 18
Magoffin.....	.....	.....	.....
Marion.....	W. E. Oldham.....	Lebanon.....	September 23
Marshall.....	S. L. Henson.....	Benton.....	September 17

COUNTY	SECRETARY	RESIDENCE	DATE
Mason.....	C. W. Christine.....	Maysville.....	September 10
Meade.....	S. H. Stith.....	Brandenburg.....	September 25
Menifee.....	E. T. Riley.....	Frenchburg.....	
Mercer.....	J. Tom Price.....	Harrodsburg.....	September 9
Metcalf.....	E. S. Dunham.....	Edmonton.....	
Monroe.....	George E. Bushong.....	Tompkinsville.....	
Montgomery.....	D. H. Bush.....	Mt. Sterling.....	September 9
Morgan.....			
Muhlenberg.....	E. L. Gates.....	Greenville.....	September 9
Nelson.....	R. H. Greenwell.....	Bardstown.....	September 17
Nicholas.....	T. P. Scott.....	Carlisle.....	September 15
Ohio.....	Oscar Allen.....	McHenry.....	September 3
Oldham.....			September 2
Owen.....	K. S. McBee.....	Owenton.....	September 4
Owsley.....	W. H. Gibson.....	Booneville.....	September 1
Perry.....	Lewis C. Coleman.....	Hazard.....	September 8
Pike.....	F. H. Hodges.....	Pikeville.....	September 2
Powell.....	I. W. Johnson.....	Stanton.....	September 1
Pulaski.....	M. C. Spradlin.....	Somerset.....	September 11
Robertson.....			
Rockcastle.....	Lee Chestnut.....	Mt. Vernon.....	September 5
Rowan.....	A. W. Adkins.....	Morehead.....	September 8
Russell.....	J. R. Popplewell.....	Jamestown.....	September 8
Scott.....	A. Y. Covington.....	Georgetown.....	September 4
Shelby.....	A. D. Doak.....	Shelbyville.....	September 18
Simpson.....	L. R. Wilson.....	Franklin.....	September 9
Spencer.....			
Taylor.....	W. B. Atkinson.....	Campbellsville.....	September 4
Todd.....	B. E. Boone, Jr.....	Elkton.....	September 3
Trigg.....	Elias Futrell.....	Cadiz.....	
Trimble.....			
Union.....	Bruce Underwood.....	Morganfield.....	September 2
Warren-Edmonson.....	W. O. Carson.....	Bowling Green.....	September 10
Washington.....	J. H. Hopper.....	Willisburg.....	September 17
Wayne.....	Frank L. Duncan.....	Monticello.....	
Webster.....	C. M. Smith.....	Dixon.....	September 26
Whitley.....	C. A. Moss.....	Williamsburg.....	September 4
Wolfe.....			September 1
Woodford.....	Geo. H. Gregory.....	Versailles.....	September 4

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\*Arch. of Ped.—56: Nov. 1939; Med. Record—Aug. 21, 1940;  
 Med. Record—150:1:1939; Arch. of Ped. 57:448 (July) 1940;  
 Med. Record—149: Jan. 1939; Surgery—6:1:1939,

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*W. E. Gary*

PRESIDENT KENTUCKY STATE MEDICAL ASSOCIATION, 1941  
APRIL TO OCTOBER





*E. P. Henderson.*

PRESIDENT KENTUCKY STATE MEDICAL ASSOCIATION, 1941





# KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

VOL. 39, No. 9

BOWLING GREEN, KY.

SEPTEMBER, 1941

## THE PRESIDENT

WILLIAM EDWARD GARY, M. D.  
Hopkinsville

188 27 Dr. Gary was born near Hopkinsville, February 26, 1883. He was educated at the University of Kentucky receiving the degree of Bachelor of Science in 1904 and degree of Medicine from the University of Louisville in 1908. He practiced medicine in Louisville from 1908 to 1919. During that time he was also connected with the State Pure Food Department as Chief of the Food and Milk Inspection Division. In this position he wrote and put in effect the first milk and meat inspection ordinances of Louisville which were also the first of the kind in Kentucky.

During the World War he served as Assistant Surgeon in the U. S. Public Health Service. In 1919 he moved to Hopkinsville where he opened and ever since has maintained a Diagnostic, Pathological and X-ray Laboratory combined with X-ray and radium treatment.

## THE PRESIDENT-ELECT

ELMER LEE HENDERSON, M. D.

Elmer Lee Henderson was born in Garrettsville, Kentucky on March 23, 1885, the fifth child in a family of ten and the son of Jonas and Henrietta Marie (Lewis) Henderson, former residents of Roanoke, Virginia.

He was educated in the public schools of Kentucky and Texas and in night schools in Louisville. He entered the Louisville Hospital College of Medicine (later consolidated with the University of Louisville) in 1905 and graduated in 1909 from the University of Louisville. He served a two-year internship in the old University Hospital which later was taken over by the Louisville Public Hospital.

Dr. Henderson began his career as a general practitioner and did post-graduate work in numerous clinics in this country.

In 1918 he joined Base Hospital No. 59, commanded by Doctor Irvin Abell, with the rank of Captain and was later promoted to the rank of Major. His first service

in the U. S. Army was a course of training at the Mayo Clinic. Leaving there he was stationed at the base hospital at Chillicothe, Ohio and later served with Base Hospital No. 59 in France. On leaving the service in 1919 he was commissioned Lieutenant-Colonel in the Medical Reserve Corps but resigned this commission in 1924.

Since his return from the Army he has confined his work to general surgery.

In addition to his membership in the American Medical Association, Kentucky State Medical Association, Jefferson County Medical Society, he is a Diplomate of the American Board of Surgery, a member of the American College of Surgeons, Southern Medical Association, Southeastern Surgical Congress, and the Louisville Surgical Society.

In 1917, Doctor Henderson was elected Councilor for the Fifth District of the Kentucky State Medical Association. In December 1917, he was elected President of the Jefferson County Medical Society. In 1923, he was elected Vice-President of the Kentucky State Medical Association. In 1936, he was elected Delegate to the American Association from the Kentucky State Medical Association, and served in that capacity until 1939 when he was elevated to the Board of Trustees of the American Medical Association. In 1936, he became Chairman of the Kentucky Section of the American College of Surgeons. In 1937, he became Councilor for the Southern Medical Association, in which capacity he still serves. He served as Vice-President of the Southeastern Surgical Congress in 1938-1939. He was President of the Alumni Association of the University of Louisville from 1939 to 1941.

Doctor Henderson is an active member of the staff of the Kentucky Baptist Hospital and of St. Joseph Infirmary; of the consulting staff of the Kosair Crippled Children's Hospital; of the courtesy staff of all other hospitals in Louisville.

He is a Thirty-Second Degree Mason and a Shriner; a life member of DeMolay, which awarded him, in 1940, the Cross of the Legion of Honor and the Founder's Cross.

In 1911, Doctor Henderson married Laura Owen of Austin, Minnesota and has two children, William Owen and Henrietta Marie. He is a member of the Walnut Street Baptist Church. He is a member of the Pendennis Club and the Big Springs Golf Club. His residence is at 87 Valley Road.

#### OUR VICE-PRESIDENTS



ERNEST LEE HEFLIN, M. D.  
Louisville

Dr. Ernest Lee Heflin was born in Fleming County, Kentucky, November 27, 1874. After attending the local schools and the Kentucky Wesleyan College at Winchester, Kentucky, he entered Jefferson Medical College at Philadelphia where he was graduated in 1897.

For several years he was associated with the late Dr. H. H. Grant. He was Adjunct Professor in Louisville College of Dentistry and Associate Professor in Hospital College of Medicine for a number of years. He has been president of the Jefferson County Medical Society, West End Medical Society, Staff of the Kentucky Baptist Hospital. He is now Vice President Kentucky State Medical Society and the Southern Medical Association.

He is an enthusiastic golfer and has traveled extensively.



WILLIAM ROBERT PARKS, M. D.  
Harlan

W. R. Parks was born in Calaveras County, California. His family afterwards moved to Stockton where he completed high school. Then he went to San Francisco and

became a pharmacist and later entered the University of Southern California as a medical student. His studies were interrupted by the World War. From November 1917 until May 1919, he was a Sergeant in the Medical Corps at Camp Lewis, Washington, attached to Base Hospital.

After the war, he transferred to the University of Louisville, completing his medical work and received his M. D. degree in 1922, and started private general practice in Harlan. He was instrumental in getting a diagnostic laboratory established in Harlan; was Director of the Meningitis Hospital during the epidemic of 1935-1936. He is a member of the A. K. K. fraternity, Masonic Lodge, Kiwanis Club, Harlan County Medical Society, Fellow of American Medical Association, Chairman of the Advisory Board of the American Medical Association, Chairman of the Advisory Board of the Salvation Army, an active church member and an ardent supporter of the Crippled Children's Commission of the County.

#### SECRETARY



A. T. McCORMACK, M. D.  
Louisville

Secretary, Kentucky State Medical Association; Editor, Kentucky Medical Journal, and State Commissioner of Health. Delegate to the American Medical Association.

#### THE TREASURER



A. W. DAVIS, M. D.  
Madisonville



A. W. Davis, M. D., Madisonville, was graduated from Louisville Medical College in 1898. After serving internship in Louisville, he attended clinics in London, Edinburgh and Dublin. Returning to America he enrolled in the New York Post-graduate College and later attended post graduate clinics at Tulane University. He was Captain, Medical Corps of the United States Army, from February 1918 to May 1919, and is now Lieutenant Colonel, Medical Corps Reserve.

#### DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

VIRGIL EARL SIMPSON, M. D.

Louisville

Dr. Virgil E. Simpson, a native of Jefferson County, Kentucky, was born in 1875, and graduated from the University of Louisville with a degree of A.B. in 1897 and a degree of M. D. in 1900. He did post-graduate work at Johns Hopkins University, University of Toronto, Cleveland Clinic, Harvard University and the Massachusetts General Hospital. He taught in the public schools of Kentucky from 1894 to 1896 and in the College of Liberal Arts, University of Louisville, 1906-1907, and has been a member of the faculty of the University of Louisville School of Medicine since 1903, occupying at present the Chair of Clinical Professor of Medicine.

Dr. Simpson holds memberships in the American Heart Association, American Association for the Study and Prevention of Goiter, Southern Medical Association, American College of Physicians, Jefferson County Medical Society, Kentucky State Medical Association and the American Medical Association. He has been a frequent contributor to various medical journals throughout the United States.



J. DUFFY HANCOCK, M. D.

Louisville

Dr. Hancock was born November 1, 1898, Jeffersonville, Indiana. Graduated

from the University of Louisville in 1921, with degree of B. S. and M. D. Surgical Intern, New York Post-Graduate Hospital, 1921-1923.

He is Associate Clinical Professor of Surgery, University of Louisville; Lecturer Nazareth College, Louisville; Visiting Surgeon, Louisville City Hospital and St. Joseph's Infirmary; member and Past-President, Jefferson County Medical Society; Past Vice-President of Kentucky State Medical Society; member of Southern Medical Association, and Southern Surgical Association; Fellow of American College of Surgeons; Past-President, Jefferson County Board of Health; Chairman State Executive Committee, American Society for the Control of Cancer; Member of Founders Group of American Board of Surgery; member of Louisville Society of Medicine and Louisville Surgical Society; Woodcock Medalist, University of Louisville 1917; member of Alpha Omega Alpha and Phi Chi Medical Fraternities.

#### ORATOR IN SURGERY



GUY AUD, M. D.

Louisville

Dr. Guy Aud was born at Cecelia and is a son of the late Dr. Charles Z. Aud who was a former President of the Kentucky State Medical Association and for many years Councilor of the Association and a member of the State Board of Health.

Dr. Aud received his A. B. degree from St. Xavier's College and his M. D. from the University of Louisville School of Medicine. He served as interne at the New York Hospital for Ruptured and Crippled and was four years at the Mayo Clinic. During the World War he was Commanding Officer of Base Hospital 210, at Toul, France, for two years.

After returning from France, Dr. Aud located in Louisville and has confined his work to surgery. He is Associate Professor of Clinical Surgery at the University of Louisville School of Medicine and is on the staff of Louisville City Hospital and St.

Joseph's Infirmary, and is a member of the American College of Surgeons and the Southern Surgical Association. Dr. Aud has contributed many articles on surgical subjects to various medical societies and Journals. He is a past-president of the Jefferson County Medical Society.

#### ORATOR IN MEDICINE



*Argentine* THORNTON SCOTT, M. D.  
Lexington

Dr. Scott was born in Lexington, July 2, 1908, the son of Caroline Thornton and Dr. John W. Scott, former president of the Kentucky State Medical Association. He received his A. B. degree from Princeton University in 1930 and degree of Doctor of Medicine from Cornell University Medical College in 1934. He was Medical House Officer on the Second (Harvard) Medical Service of the Boston City Hospital, then Medical Resident at the Pondville State Cancer Hospital at Wrentham, Mass. He was Assistant Resident in Medicine at the Massachusetts General Hospital for two years, 1936-1938 and Teaching Fellow in the Harvard Medical School. He then served one year as Chief Resident in Medicine at the Massachusetts General Hospital and was Assistant in Medicine at the Harvard Medical School. Before returning to Kentucky, he spent some extra time in Neurology at the Massachusetts General and Boston City Hospitals. Since January 1940 he has been associated with his father Dr. John W. Scott, and Dr. John Harvey in the practice of Internal Medicine at Lexington. He is an Associate of the American College of Physicians.

#### THE COUNCILORS FIRST DISTRICT

Dr. Stilley was born in Concord, Calloway County, May 19, 1866. Educated at Benton Seminary, 1880-1884; Evansville Commercial College 1885; Medical Department University of Louisville, 1888-90; Post-graduate University of Louisville



VAN ALBERT STILLEY, M. D.  
Benton

1895. Chicago Polyclinic 1907. Secretary Marshall County Medical Society 1890-1905; President in 1906. Health Officer Marshall County, 1893-1924. Member of Draft Board 1917-1918. Official Examiner Military C. M. T. C. Member State Board of Health 1924-27; Councilor Kentucky Medical Association, 1922-39. Chairman, Committee of Public Instruction and Legislation, Kentucky State Medical Association; Director of Public Health 1927. Member of Marshall County Medical Society, Southwestern Kentucky Medical Association, Secretary 1901-1907; President 1908; member Kentucky Medical Association, Southern Medical Association, American Medical Association, Knight Templar, Shriner.

#### SECOND DISTRICT

Dr. Griffith, oculist and aurist, was born in Owensboro, September 19, 1867. Attended Tulane University where he received his degree in medicine in 1888; Postgraduate work in Royal Westminster Ophthalmic Hospital, London, England; Central London Throat Hospital, London; among first in Kentucky to receive degree of Fellowship in American College of Surgeons. Surgeon in Third Regular Kentucky State Guards, 1889-90; appointed Acting Surgeon in Influenza epidemic,





D. M. GRIFFITH, M. D.  
Owensboro

1918-1919, by Surgeon General Rupert Blue; one of the five Kentucky physicians appointed by President Wilson as head of doctors and nurses during the World War. President Kentucky State Medical Association, 1907-1909, only man elected twice; Ohio Valley Medical Society, 1910, and Councilor since 1911; Organizer and Vice-President Owensboro Training School for Nurses; one of the organizers and Past-President Kentucky Eye, Ear, Nose and Throat Society; Past-President, Owensboro Chamber of Commerce; one of the organizers and Vice-President, Daviess County Historical and Museum Association, Director of Transylvania Society since its organization. Member Daviess County, Kentucky, Southern and American Medical Associations; American College of Surgery, Democrat, Mason, Elk.

Built own office building in 1889 and still has office in it.

Author: *Dysmenorrhea Cured by Treating Nose*, published in 1914 in *Seman's Internationales Centralblatt fuer Laryngologie*, Berlin, Germany.

#### THIRD DISTRICT

Dr. Turner was born on a farm near Gamaliel, Monroe County. Educated in the county schools and received a literary degree from Transylvania College, and

his M. D. degree in 1910 from the University of Louisville. Has taken post-graduate work, Cook County, Illinois, Johns Hopkins, Polyclinic of New York, Mayo Clinic. Was interne at Louisville City Hospital in 1914 and 1915, and Radiologist at Community Hospital, Glasgow, since 1930. Is President of Barren County Board of Health, Barren County Library Association; Past President Barren County Medical Society and elected Councilor of Third District in 1932 to fill unexpired term of Dr. C. C. Howard. Re-elected Councilor in 1936. Past



C. C. TURNER, M. D.  
Glasgow

Vice-President and Orator in Medicine, Kentucky State Medical Association. Past President of staff of Community Hospital, Glasgow; member of Kentucky State and American Medical Associations and Radiography Society of North America. First Lieutenant, Medical Corps, Base Hospital No. 59, serving 10 months over seas during World War. His hobbies are golf and gardening.

#### FOURTH DISTRICT

Dr. Greenwell was born in Balltown, Nelson County, November 27, 1873 and received his early education in the public schools of Balltown, and his B. A. degree from Cecelia College in Hardin County, and his Master's Degree from the same



J. I. GREENWELL, M. D.

New Haven

college in 1895. He matriculated in the Louisville Hospital College of Medicine where he won the degree of M. D. in 1900, and at once located in New Haven where he has practiced his profession continuously until the present time. Dr. Greenwell has given his support to the Democratic party, is a Roman Catholic, and belongs to the New Haven Council, No. 2208, Knights of Columbus. He is a member of the Nelson County Medical Society and the Kentucky State Medical Society and is serving on the County Board of Health. He is also a member of the American Medical Association. To Dr. and Mrs. Greenwell have been born twelve children.

Dr. Greenwell is a Director and Vice-President of the Bank of New Haven and has shown a deep interest in everything affecting the prosperity and progress of his community. Kind and sympathetic in disposition, he has the faculty of inspiring confidence in his patients and to an unusual degree he has been successful in the practice of his profession and is regarded as one of the leading physicians of Nelson County.

## FIFTH DISTRICT

Dr. J. B. Lukins was born in Fleming County, November 4, 1881 the son of J. P. and Mary Lukins. He received his education in the Fleming County schools and the Flemingsburg Graded High School and his medical education at the Hospital College of Medicine, Louisville, from which he was graduated in 1906. He received an



J. B. LUKINS, M. D.

Louisville

appointment as intern at the Louisville City Hospital where he served for one year. Immediately upon completion of this service, he located in Louisville. He took post-graduate work at the Mayo Clinic, and was resident in surgery at Bellevue Hospital, New York, in 1919. He has been a member of the faculty at the Medical College of the University of Louisville since his graduation, and since 1937 has been Associate Professor of Gynecology and Abdominal Surgery. He served as First Lieutenant in the United States Army during the first World War through 1918 and to April, 1919. He is a Fellow of the American College of Surgeons and the Southeastern Surgical Congress, and a member of the Jefferson County Medical Society, the Kentucky State Medical Association, the Southern Medical Association, and the American Medical Association. He is a past president of Kentucky State Medical Association.

## SIXTH DISTRICT

Dr. Atkinson was born in Campbells-ville, March 7, 1896 and is the son of J. L. Atkinson, M. D. and Lena Reno Atkinson. He received his B. S. degree from Georgetown College in 1917 and graduated from the Jefferson Medical College, Philadelphia, in 1921, with an M. D. degree. Elected to Council at Harlan, 1934 to fill the unexpired term of R. C. McChord, and was re-elected at Paducah in 1936.

He is a member of Taylor County Med-





W. B. ATKINSON, M. D.  
Campbellsville

ical Society; Kentucky State Medical Association, American Medical Association, Southern Medical Society, Muldraugh Hill Medical Society, and Southeastern Surgical Congress. He is local surgeon for the Louisville and Nashville Railroad Company.

#### SEVENTH DISTRICT



VIRGIL G. KINNAIRD, M. D.  
Lancaster

Dr. Virgil Gibney Kinnaird, was born at Lancaster, October 15, 1890. He received his education at the Lancaster graded and high schools, and attended Centre College one year. He spent two years at the University of Louisville Medical School, and transferred to Jefferson Medical College, from which he received his degree of Medicine in 1913. He served two years in-

ternship at Kings County Hospital, Brooklyn, New York. Went overseas with Base Hospital No. 40. Entered service at Fort Riley, Kansas, July 1917, as First Lieutenant; discharged Major, Medical Corps, July 1919. Dr. Kinnaird returned to Lancaster and entered the general practice of medicine and surgery. He was elected to the Council for the Seventh District in 1922.

#### EIGHTH DISTRICT



LUTHER BACH, M. D.  
Bellevue

Born in Breathitt County, October 19, 1891, Dr. Bach was educated in the public schools and at Berea College. Taught in the public schools prior to entering medical school. Entered the University of Louisville Medical Department in 1911, from which institution he received his M. D. degree in 1915. Internship at Good Samaritan Hospital, Lexington, 1915 to 1916. Associated with his brother in Bach Hospital, Jackson, after internship until his entry into war, August, 1917. Commissioned First Lieutenant and served from August, 1917 to May, 1919, 10 months in France. After discharged from service became associated with his brother again in Bach Hospital, Jackson, until January, 1926. Entered Civil Service and was sent to Panama Canal for one year. While in Panama, lost his health, and returned to Jackson and served as Health Officer during the Eastern Kentucky flood. Came to Campbell County in 1928 where he has been in active practice since. Since 1928 he has been in active practice in Newport and Bellevue.

Dr. Bach has served as President, Vice-President and Secretary of the Campbell-Kenton County Medical Society; President and Secretary of the Licking Valley Medical Society; President of the Hospital Service Association of Northern Kentucky since its organization in 1938. His post-graduate work is as follows: Internal Medicine and Roentgenology, Chicago Post-graduate Medical School in 1921;

Pediatrics, Children's Free Hospital, Louisville, 1934 to 1936; General Courses, University of Louisville; Cardiology, Harvard University, August and September, 1935, and the same course again in August, 1937; Cardio-Renal Disease, Northwestern University, March, 1939; Hematology, Ohio State University, Columbus, March, 1940. He is a member of the Campbell-Kenton, Licking Valley, Kentucky State Medical Association, Southern Medical, American Medical Association, and Associate member of the American College of Physicians. He was elected Councilor, Eight District, Kentucky State Medical Association and Delegate to the National Pharmacopeal Association, September 14, 1939.

#### NINTH DISTRICT



PROCTOR SPARKS, M. D.  
Ashland

Dr. Sparks was born June 7, 1890 at Martha, son of Judge Meredith B. Sparks and Alice Sparks. He received his early educational training at Blaine, Kentucky, and at the Louisa Normal Institute at Louisa.

He was married June 10, 1908 to Mary Gambill and later had two daughters, Joy and Irene. He taught one year at Martha, after which he studied at Draughon's Business College, Knoxville, Tennessee, and then served four years as cashier at the Bank of Blaine.

At this time he was able to satisfy his burning desire to study medicine, and went to the Louisville Medical College where he received his M. D. degree in 1917. He has done post-graduate work at Chicago, Harvard and Louisville in Pediatrics and Anesthesia. Dr. Sparks has been engaged in the general practice of medicine in Ashland for the past seventeen years. Here he has served as Chairman of the Advisory Board of the Salvation Army, Director of the First Federal Savings and Loan Association, and Alderman on the Ashland City Council. He is a Mason, Shriner, and belongs to the I. O. O. F., and the Ashland Lions Club.

#### TENTH DISTRICT



CHARLES A. VANCE, M. D.  
Chairman of the Council  
Lexington

Dr. C. A. Vance was born in Lexington, March 23, 1880; attended public schools and Hamilton College; graduated with an A. B. degree Transylvania College, 1900; received M. A. degree in 1903 also from Transylvania; M. D. degree from the University of Louisville Medical Department. Interned St. Joseph's Infirmary 1903 and 1904. Substitute interne at the New York Hospital, Hudson Street Hospital, Mount Sinai Hospital, New York City, and St. Johns' Riverside Hospital, Yonkers, New York, June 1904 to January, 1905. Hudson Street Hospital, New York, January, 1905 to July, 1906; St. John's Guild Children's Hospital, Staten Island and Manhattan Maternity Hospital, New York City until January, 1907. Began practice in Lexington January, 1907.

He was Captain in the Medical Corps, U. S. Army from September, until after Christmas, 1918, stationed at Camp Greenleaf, Chickamauga Park, Georgia. He has confined his practice to general surgery since July 1, 1919. He is consulting surgeon for St. Joseph Hospital, Lexington; Consulting Surgeon for Veterans Administration Hospital, Lexington, and attending Surgeon, Good Samaritan Hospital, Lexington. He is a member of the Fayette



County Medical Society; Kentucky State Medical Association; American Medical Association; Southern Medical Association; Fellow of the Southern Surgical Association; Fellow of the American College of Surgeons; Fellow of the American Society of Traumatic Surgery, and certificate from American Board of Surgery. He was elected Councilor for the Tenth District at the Owensboro meeting in 1925 and Chairman of the Council at the Lexington meeting, 1931. Since graduating he has written 45 or 50 articles on various surgical subjects, the last one being read last December at the meeting of the Southern Surgical Association at White Sulphur Springs, West Virginia, subject: "Surgery In Hemophilia With Report of Cases."

#### ELEVENTH DISTRICT



HARRY KING BUTTERMORE, M. D.

Liggett

Dr. Buttermore was born at Connellsville, Pennsylvania, February 18, 1893. He was graduated from the University of Louisville School of Medicine in 1907, and served as intern and Resident Surgeon at Braddock General Hospital, Braddock, Pennsylvania; did post-graduate work at the University of Pittsburgh, and is a Past President of the Harlan County Medical Society and Cumberland Valley Medical Society. He has served as Councilor of the Eleventh District since 1933.

#### GUEST SPEAKERS

Dr. Curtis was born in Portage, Wisconsin, May 20, 1881 and received his B. S. degree from the University of Wisconsin in 1902 and his M. D. degree from Rush Medical College and did graduate study in Berlin and Vienna, returning to America to interne at Cook County Hospital, Chicago, for 18 months and later appointed Clinical Professor of Gynecology, Northwestern University Medical School. In 1918 he was appointed Captain Medical Corps, World War for overseas service. When he returned from overseas he be-



ARTHUR HALE CURTIS, M. D.

Chicago

came President of the Chicago Gynecological Society and later appointed Chairman of Department and Professor of Gynecology of Northwestern University Medical School. At the Sixth British Congress of Obstetrics and Gynecology, Manchester, England, he was an honored guest in 1927 and in this same year he became Chairman, Section of Obstetrics, Gynecology and Abdominal Surgery of the American Medical Association. In 1929 his book "Gynecological Diagnosis" was published by W. B. Saunders Company, Philadelphia, one of our advertisers, which book has gone into many editions. He has contributed many scientific papers and is a member of all the gynecological societies of America.



FRANK HOWARD LAHEY, M. D.

Boston

Frank Howard Lahey, Surgeon, President American Medical Association, was born at Haverhill, Massachusetts, June, 1880. He received his medical education at Harvard in 1904. He was appointed Surgeon Long Island Hospital 1904-05; Boston City Hospital, 1905-07; Resident Surgeon Haymarket Square Relief Station, 1908; Professor of Surgery Tufts Medical School 1913-1917; Director of Surgery A. E. F. Evacuation Hospital No. 30, Major Medical Corps World War; Instructor in Surgery, Harvard Medical, 1923-24. At present Director Surgery Lahey Clinic, Boston. Surgeon-in-Chief, N. E. Deaconess and N. E.

Baptist Hospitals; Regent International College of Surgeons in Geneva. Fellow of American College of Surgeons and member of American and International Surgical Associations; American Association for the Study of Goiter.



ALPHONSE McMAHON, M. D.  
St. Louis

Dr. McMahon is Senior Instructor in Medicine, St. Louis University School of Medicine; a past-vice-president of the American Medical Association; past-president St. Louis Medical Society; past-president American Therapeutic Society; Councilor from Missouri and Chairman of the Executive Committee of the Southern Medical Association.



FRED WHARTON RANKIN, M. D.  
Lexington

Dr. F. W. Rankin, President-Elect of the American Medical Association, was born in Mooresville, North Carolina, December 20, 1886. He was graduated from the University of Maryland and became resident surgeon at the University Hospital in Baltimore and later was appointed assistant demonstrator of anatomy and associate in surgery at the University of Maryland Medical School from 1913 to 1916. He then joined the Mayo Clinic acting as assistant surgeon at St. Mary's Hospital from 1916-1923, and served as surgeon to the Mayo Clinic and an associate professor at the University of Minnesota Medical School,

Mayo Foundation, 1926-1933. He then moved to Lexington where he became surgeon to St. Joseph's and the Good Samaritan Hospitals. During the World War Dr. Rankin served as a Major in the Medical corps and commanded Base Hospital No. 26. He is now a Colonel in the Medical Reserve Corps. He was president of the Southern Surgical Association and the Southeastern Surgical Congress and founder member of the American Board of Surgery. His book "The Colon, Rectum and Anus" is widely used as a text-book not only in America but in foreign countries.

Dr. Rankin has been appointed Clinical Professor of Surgery at the University of Louisville, School of Medicine.



THOMAS G. HULL,  
DIRECTOR SCIENTIFIC EXHIBITS  
AMERICAN MEDICAL ASSOCIATION  
Chicago

Mr. Hull received his Ph. B. from Yale in 1913 and his Ph. D. from the same school in 1916. From 1916 to 1917 he was Assistant in charge of bacterial culture collection of the American Museum of Natural History, and from 1917 to 1918 was the Director of Exhibits, U. S. Food Administration of Washington. He served as First Lieutenant, Sanitary Corps, U. S. Army during the World War and then from 1920 to 1930 was the Director of Laboratories of the Illinois State Department of Health at Springfield, and since that time to the present date he has been the Director of Scientific Exhibits of the American Medical Association.

#### CHAIRMAN OF PROGRAM COMMITTEE

Dr. Pritchett was born in Missouri, October 26, 1888. His preliminary education was received at Vanderbilt University, Nashville, and his degree of Medicine at the University of Louisville School of Medicine in 1911 and served his internship at the Louisville City Hospital from 1911-1912. Externe Louisville Children's Free





JAMES H. PRITCHETT, M. D. *C*  
Louisville

Hospital, post-graduate work at Great Ormond Street Hospital, London, England, and Children's Hospital, Brodeaux, France. Professor of Pediatrics, University of Louisville School of Medicine. Past-president Jefferson County Medical Society; past-vice-president Kentucky State Medical Association; Chairman of the Program Committee, 1935 and 1941. Past Orator in Medicine, member of Phi Chi and Alpha Omega Alpha fraternities; President Children's Free Hospital Staff. Member of American Editors Association and author of various papers pertaining to pediatrics. Member of the staffs of the Louisville City Hospital, Kosair Crippled Children's Hospital, St. Joseph's, Sts. Mary and Elizabeth's, Baptist and Deaconess. Major in Army of the American Expeditionary Forces.

#### HOTEL RESERVATIONS

We are again emphasizing the importance of making your hotel reservations without delay. Louisville at the present time, due to the defense program and close proximity to Fort Knox, is crowded to capacity, but every doctor is assured ample accommodations if they will engage their rooms early.

The headquarters of the Association will be at the Brown Hotel and reservations

can be made by writing Dr. A. R. Bizot, chairman of the Hotel Committee or directly to the hotels. Already many of the doctors have made their reservations as this promises to be one of the most interesting and instructive meetings ever held by the Association.

Remember the dates of the meeting, Monday, September 29th through Thursday, October 2nd.

#### ENTERTAINMENT IN LOUISVILLE

On Tuesday evening, September 30th at 10:00 P. M. the members of the Association and their wives will be the guests of the Jefferson County Medical Society at a reception and smoker on the roof garden of the Brown Hotel.

On Wednesday evening October 1, will be held the annual subscription dinner at 6:30 P. M. in honor of our President-elect E. L. Henderson, and the President-elect of the American Medical Association F. W. Rankin. Immediately after the program there will be entertainment, music and dancing in the Crystal Ball Room of the Brown Hotel and all members and their families are invited to this entertainment.

The Ladies Auxiliary will have their headquarters at this same hotel and their printed program will contain the date and place for the many entertainments that the ladies of the Jefferson County Auxiliary have arranged for the visiting ladies.

#### INTERPRETATION OF THE KAHN REACTION

In a recent article in the Journal of the American Medical Association, July 26, 1941, Drs. Joseph Earle Moore and Harry Eagle discuss the confusing multiplicity of serologic tests and in this article they outline the interpretation of the reports in such a concise and understanding manner that we are printing it in the Journal. We are adding to this interpretation the words "sensitivity" which means freedom from false negatives, and "specificity" which means freedom from false positives. After carefully perusing this editorial, the reports should be easily interpreted.

POSITIVE: A result of positive that all the tests used in this laboratory indicate the presence of a reactive factor in the serum commonly associated with syphilitic infection. However, a diagnosis of syphilis must not be made solely on the basis of a single positive test.

If the serologic result is not supported by history and/or physical findings, a second specimen of blood should be submitted for check. If the result of the check also is positive, syphilis is indicated with a high degree of probability, unless the patient has, or has just recovered from, some intercurrent infection which may cause a false positive result.

**DOUBTFUL:** A report of doubtful implies that the individual tests used in this laboratory were either discrepant or inconclusive (incomplete aggregation in the flocculation test, partial fixation of complement in the Wassermann). A doubtful result may or may not indicate syphilis. If the patient is known to have been infected with syphilis, and particularly if he has been treated, a doubtful reaction may be regarded as positive. If there is no history or clinical evidence of syphilis, a doubtful test indicates the necessity for, first, a particularly careful review of history and physical findings and, second, an immediate repeat serologic test for check. If the result of the check examination is likewise doubtful, the serologic examination should be repeated in this and other laboratories and, if necessary, several times by different serologic procedures, before the possibility of syphilis is dismissed.

**NEGATIVE:** A report of negative implies that the particular tests used in this laboratory did not indicate the presence of reagin (absence of visible aggregation in the flocculation test and no fixation of complement (complete hemolysis) in the complement fixation test). A negative report does not exclude the possibility of syphilis.

Frequently a positive test is absent in the early stages of primary syphilis. Negative reactions may occur as a result of treatment. If there is any clinical reason to suspect syphilis, a negative result should be checked by a second blood specimen. The diagnosis of early primary syphilis should, if possible, be made by darkfield rather than by serologic test.

#### HOBBY AND ART EXHIBIT

The feature of offering a Hobby and Art Exhibit, during the annual fall Meeting will be continued this year; and we trust to have the enthusiasts show some of their new works and hobbies.

The exhibit is open to all members of the Kentucky Medical Association and any phase of the finer arts or hobby pursuits will be acceptable, the finer, the bet-

ter; the more odd the hobby the more intriguing.

Application may be sent by informal letter or card to the Chairman of your Committee, Dr. Jesshill Love, 1010 Brown Building, Louisville.

Let's make this year's Exhibit a large and interesting one.

#### A DOCTOR OF THE 70's AND 80's

When one reads this book, he finds it differs from other biographies because of the clearness with which it is written, being the biography of one of the Nation's outstanding country doctors, Robert B. Pusey, of Elizabethtown, Kentucky, and written by his son Dr. William Allen Pusey, who became one of America's foremost specialists and honored by the highest gift of the profession, being made President of the American Medical Association. It has often been stated that in this world, there are three great professions, theology, law and medicine, the latter always looking forward and upward endeavoring to emulate the Great Physician. This illustrious father imbued with the highest ideals of altruism, so impressed the son that he too, became a physician.

In the son's description of his father's life, he had to, for the sake of brevity merely outline many details. Frequent and excellent illustrations supplement any inadequacies in the text. There are numerous photographs of this country doctor's horses, buggies and even his saddle-bags, when reproduced on the high quality of paper used by the publishers flatters to the utmost, and accounts for two printings within one month of this most interesting volume.

In these days of an upset world, even to the extent of disturbing the otherwise placid medical profession, nothing that a physician can read will give more mental rest, tranquility of mind, uplifting thoughts, and satisfaction in the realization that we, too, are a member of the medical profession, than the possession and reading of this book. A short well written story of an eminent physician of "The Horse and Buggy Days" who contributed much to his profession, his acts being given on every page by his worthy son. No doctor's library should be considered complete unless it contains a copy of this interesting work, the life of one of our own profession so rich in the deeds of kindness and mercy to humanity, should appeal to us all.



## THE ABUSE OF PERSONAL LIBERTY

From the editorial page of the August issue Nebraska State Medical Journal we publish this timely and thought-provoking editorial.

"It takes an emergency to arouse the public from lethargy. In 1917 America suddenly discovered that only about half its manpower was fit for military service. Emphasis was duly placed on faulty nutrition of our youth at the time. Why in a land of plenty our young men should be poorly nourished was never explained satisfactorily. Before the alarm had made a respectable impression the war was over and the sensitive leaders settled down to prosper on the stock market or on Florida land. The results of this double barreled boom are too familiar to everyone for further elucidation. A few stragglers who were too poor or too wise to participate in the frenzy of big finance remained to speculate on the faults of organized medicine and the cost of medical care. The sum total of their efforts are more in the nature of history than economics. Majority reports, minority reports and even individual reports and recommendations are recorded. Net cost of the study, including publicity, was some two million dollars of Foundation moneys. Practical result—nothing.

"In the meantime progress in medicine assumed unprecedented scales, the laboratories and clinics turned out new discoveries and new techniques for improving health, prevention and cure of disease; the American Medical Association and its component State and County Societies redoubled their efforts to acquaint the public with the latest procedures for physical and mental improvement. Peacefully, even if no longer in material abundance, the good citizens of our free land proceeded to buy automobiles and radios on time. Whatever interest remained in nutrition was centered around popular fads for weight reduction. Mr. and Mrs. America became sylph-conscious.

"Our Nation is again faced with a crisis. More than 40% of our man power is found unfit for military duty. Approximately one-half of the youths thus eliminated have correctable defects which if attended to, would place them in the eligible class. Incidentally, it would give them a better earning capacity in civil life if they had their venereal diseases cured, their hernias repaired, the nasal obstruction relieved,

their weights adjusted, etc. But they do not elect to undergo treatment. They would rather struggle with their handicaps than submit to remedial care. Under constitutional guarantee of personal liberty they feel free to spread gonorrhea and syphilis, or to retain their limited economic status. Through nurtured incapacity they also feel free to neglect an obligation to their country."

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RETURN YOUR INFORMATION CARD  
FOR THE DIRECTORY PROMPTLY

About September 1, an information card will be sent from the headquarters office of the American Medical Association to every physician in the United States and Canada. The information secured is to be used in compiling the Seventeenth Edition of the American Medical Directory.

The directory is prepared at regular intervals in the Biographical Department of the American Medical Association. The last previous edition appeared in 1940. This volume is one of the most important contributions of the American Medical Association to the work of the medical profession in the United States; it has been especially valuable in the medical preparedness program. In it, as in no other published directory, are dependable data concerning physicians, hospitals, medical organizations and activities. The directory provides full information concerning medical colleges, specialization in the field of medical practice, memberships in special medical societies, tabulations of medical journals and medical libraries and, indeed, practically every important fact concerning the medical profession in which any one might possibly be interested.

Before filling out the information card, read the instructions carefully. Physicians are especially urged to state whether or not they are on extended active duty for the medical reserve corps of the United States Army and Navy. Fill out the card and return it promptly whether or not a change has occurred in any points on which information is requested. If a change of address occurs before March 1, 1942, report it at once. Should you fail to receive a card before the first of October, write at once to the headquarters office stating that fact and a duplicate card will be mailed.

## IMPORTANT ANNOUNCEMENT

The Kentucky Pharmaceutical Association announces a forthcoming radio program of even greater potential value to the general public than to the medical profession and the profession directly sponsoring it. The program will be carried over Station WLW, Cincinnati, twice a day, morning and evening, from September 15 to September 28, inclusive.

The chief purpose of this program is to encourage people to become, as far as possible, physically fit to meet the rigors of approaching winter with a minimum of strain upon their health. Physical check-ups of every member of the family by the family physician will be urged as an essential procedure. In this way, those not in good physical condition will discover in advance what their remedial troubles or defects are and have competent advice as to how the troubles or defects may be best and soonest corrected; those in good physical condition will have not only the satisfaction of knowing that they are physically fit, but also the knowledge of what is necessary to keep themselves in that condition.

Incidentally and naturally, the public will be urged to do their shopping, as far as practicable, at the neighborhood drug-stores. This is as it should be. The neighborhood druggist serves an almost indispensable purpose and should be patronized whenever practicable. Self interest, convenience and wise economy combine in so demanding.

It is particularly encouraging to note the degree of cooperation obtaining between the medical and the pharmaceutical professions. They are natural allies and should always work together.

The proposed program has the unqualified endorsement of the State Department of Health and should be heard by every family in Kentucky having a radio. Watch the newspapers for the hours of the morning and evening broadcast and be sure to tune in at those hours.

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**The challenge to eradicate tuberculosis by 1960** is based upon sounder premises than the slogan of the middle twenties to eradicate diphtheria in New York State. Yet, for all practical purposes diphtheria has been eradicated there. The same can be done with tuberculosis if the task is given equal citizen support, community effort and volunteer leadership. Thomas Parran, M. D., Surgeon General, U. S. Public Health Service, in S. C. A. A. News, May, 1941.

## CAN THE DENTIST MAKE A CONTRIBUTION TO THE PREVENTION OF HEART DISEASE?

During the session of the mid-winter Dental Clinic in Chicago in February, a group of thoughtful dentists were stimulated by a suggestion made by one of their older associates that has aroused in some of them the desire to do a piece of cooperative research that may be of real value. The query was, "Could the dentist solve the problem as to the cause of some part of the heart diseases from which so many thousands of people are dying each year?" This query fell on receptive minds and the Board of Trustees of the Kentucky State Dental Association has offered a plan for the cooperative research between practicing physicians and dentists and specialists in roentgenology and cardiology that seems to have great possibilities.

An effort is being made by the State Dental Association to secure from as many dentists as possible an agreement to take at least ten full mouth x-ray pictures that have been diagnosed by a physician as having diseased hearts. As this research goes along, the pictures will be made by dentists, then they will be sent to the State Department of Health where they will be filed, after being identified by numbers. When several hundred such x-rays have been accumulated, the Kentucky State Medical Association will be asked to appoint a committee of expert roentgenologists who will be requested to determine the pathologies shown in each film. Such conditions would include potential pyorrhea, broken root ends, devitalized teeth, and granulomas, or whatever else is found.

A committee of Cardiologists will then be selected who will determine what, if any questions have been answered as to the etiological factors in any forms of any diseases of the heart.

The dentists in each county will present this research project to the county medical societies in order to secure their cooperation. It is apparent that the larger the number of films made the greater is the possibility of the study being of value.

O. D. Wilson D. D. S., Owensboro, is the Chairman of the Committee representing the K. S. D. A. and he will be very happy to correspond with any physician who desires any further information on this subject.



**OFFICIAL ANNOUNCEMENTS****PRELIMINARY PROGRAM**

KENTUCKY STATE MEDICAL ASSOCIATION  
Louisville

Crystal Ball Room—Brown Hotel  
September 29, 30, October 1, 2, 1941

Tuesday, September 30

9:00 A. M.

Call to Order by the President

.....W. E. Gary  
Hopkinsville

Invocation.....Rev. H. W. Tribble  
Southern Baptist Theological Seminary  
Louisville

Installation of President

Report of Committee on Arrangements  
.....M. J. Henry  
Louisville

**SCIENTIFIC SESSION**

Tuesday, September 30

9:30 A. M.

1. Suppurative Diseases of the Lung  
.....Lawrence W. Nehil  
Louisville
2. Pulmonary Tuberculosis Simulating Non-Tuberculous Lesions  
.....E. R. Gernert  
Louisville
3. Our Dental Problems  
.....A. P. Williams, D. D. S.  
Louisville
4. Treatment of Traumatic Injuries of the Face.....E. C. Hume, D. D. S.  
Louisville
5. The Management of Primary Dysmenorrhea with Special Consideration of the Anatomy and Surgical Technic.....Arthur H. Curtis  
Chicago

**SPECIAL ORDER**

Tuesday, September 30  
12:00 M.

**ORATION IN SURGERY**

Changes in the Surgical Treatment of Peptic Ulcer.....Guy Aud  
Louisville

**SCIENTIFIC SESSION**

Tuesday, September 30  
2:00 P. M.

1. Evolution of the Walking Iron, Turn Buckle, and Knee Hinge in Fractures.....Misch Casper  
Louisville
2. Surgical Diseases of the Spleen  
.....D. P. Hall  
Louisville

3. Conservative Management of Pelvic Infection.....Delmas M. Clardy  
Hopkinsville
4. The Problem of Abortion  
.....Stanley S. Parks  
Lexington
5. The Diagnosis and Management of Lesions of the Stomach, Duodenum and Jejunum.....Frank H. Lahey  
Boston
6. The Management of the Anemias in General Practice....Marion Beard  
Louisville

Tuesday, September 30

5:00 P. M.

Round Table Discussion

Cardiac Emergencies....Emmet F. Horine  
Louisville

**PUBLIC SESSION**

Tuesday, September 30

8:00 P. M.

- Address.....Keen Johnson  
Governor of Kentucky
- Unrecognized Features of Gross Pelvic Anatomy as Applied to Gynecological Surgery.....Arthur H. Curtis  
Chicago
- Developments in Medicine, National, Economic and Scientific...Frank H. Lahey  
Boston

**SCIENTIFIC SESSION**

Wednesday, October 1

8:00 A. M.

Round Table Discussion

- Fractures.....W. Barnett Owen  
Louisville
- a. First Aid, R. Arnold Griswold
  - b. Primary Treatment of Compound Fractures, K. Armond Fischer
  - c. Colles Fracture, Richard L. Hudson
  - d. Potts Fractures, Charles Wood
- Wednesday, October 1

9:00 A. M.

1. Appendicitis in Kentucky..J. B. Lukins  
Louisville
2. Six Thousand Spinal Anesthetics  
.....C. C. Howard  
Glasgow
3. Chemotherapy in Pneumonia  
.....Alphonse McMahon  
Saint Louis
4. What Progress Has Been Made in Cancer?.....L. W. Frank  
Louisville
5. The Value of Gastric Analysis  
.....F. M. Stites  
Louisville

**SPECIAL ORDER**

Wednesday, October 1  
12:00 M.

**ORATION IN MEDICINE**

The Epilepsies.....Thornton Scott  
Lexington

## SCIENTIFIC SESSION

Wednesday, October 1

2:00 P. M.

1. The Prevalence of Neuroses in General Practice.....J. D. Handley  
Hodgenville
2. Recent Advances in Contagious Disease.....J. W. Bruce  
Louisville
3. Treatment of Biliary Symptoms after Cholecystectomy....S. C. Smith  
Ashland
4. Sinusitis and Its Relation to General Systemic Disease.....A. L. Bass  
Louisville
5. Consultations .....Walter Hume  
Louisville
6. Non-Penetrating Wounds of the Heart.....Morris M. Weiss  
Louisville

## SCIENTIFIC SESSION

Wednesday, October 1

4:00 P. M.

## ROUND TABLE DISCUSSION

- Obstetrics.....W. T. McConnell  
Louisville

## ANNUAL SUBSCRIPTION DINNER

Crystal Ball Room—Brown Hotel

Wednesday, October 1

6:30 P. M.

- President's Address.....E. L. Henderson  
Louisville
- Address: The Medical Profession and Military Preparedness.....F. W. Rankin  
Lexington

## SCIENTIFIC SESSION

Thursday, October 2

9:00 A. M.

1. SYMPOSIUM ON SELECTIVE SERVICE:
  - a. Selectees After They Arrive in the Army....Col. C. D. Holmes  
Fort Knox, Station Hospital  
Chief Surgical Service
  - b. Examination of Selectees  
.....E. S. Dunham  
Edmonton
  - c. Experiences with the Examination of Selectees..J. C. Graham  
Greensburg
  - d. The Medical Profession and the Selective Service  
.....W. N. Lipscomb  
Louisville  
Louisville
2. Peritoneoscopy...J. Albert Vesper, Jr.  
Newport
3. Early Symptoms of Carcinoma of the Colon and Rectum..Irvin Abell, Jr.  
Louisville

4. Management of Middle Ear Infections.....Arthur L. Juers  
Louisville
5. Advantages of Direct X-Ray Therapy.....Jesshill Love  
Louisville
6. The Clinical Latitude and Application of Radiation Therapy...D. Y. Keith  
Louisville

## LOCAL COMMITTEES FOR THE LOUISVILLE MEETING

## COMMITTEE ON ARRANGEMENT:

M. J. Henry, Chairman

## RECEPTION COMMITTEE:

W. E. Gardner, Chairman

Irvin Abell

E. S. Allen

Bernard Asman

P. F. Barbour

R. Alexander Bate

Oscar E. Bloch

Mischa Casper

Chauncey W. Dowden

G. S. Hanes

E. Lee Heflin

G. A. Hendon

Chas. W. Hibbitt

Emmet F. Horine

A. C. McCarty

O. O. Miller

J. J. Moren

W. B. Owen

J. Garland Sherrill

V. E. Simpson

L. H. South

Edward Speidel

Frank Stites

## FINANCE COMMITTEE:

J. Duffy Hancock, Chairman

G. G. Altman

Benjamin L. Brock

David M. Cox

L. Ray Ellars

I. T. Fugate

H. H. Hagan

Herman Mahaffey

Louis Mitzlaff

Henry M. Rubel

James R. Stites

Malcom Thompson

Esther C. Wallner

Harry M. Weeter

Karl D. Winter

## ENTERTAINMENT COMMITTEE:

B. W. Smock, Chairman

Guy Aud

C. Wm. Dowden, Jr.

Laman A. Gray

R. Arnold Griswold

Chas. W. Jefferson



## MEETING PLACE COMMITTEE:

Woodford B. Troutman, Chairman  
 Lytle Atherton  
 Gordon S. Buttorff  
 Thos. VanZandt Gudex  
 David L. Hill  
 Robertson O. Joplin  
 A. D. Kennedy  
 A. M. Leigh  
 A. W. Nickel  
 H. H. Richeson  
 John Stites

## HOTEL COMMITTEE:

A. R. Bizot, Chairman  
 Irvin Abell, Jr.  
 Austin Bloch  
 Ellis Allen, Jr.

## AUTOMOBILE COMMITTEE:

Uly H. Smith, Chairman  
 Henry B. Asman  
 J. Allen Kirk  
 A. J. Pauli  
 M. H. Pulskamp  
 Frederick G. Speidel

## BADGE COMMITTEE:

Edward J. Tracy, Chairman  
 Victor Atherton  
 D. M. Embry  
 R. I. Kerr  
 C. H. Likins

## PUBLICITY COMMITTEE:

J. B. Lukins, Chairman  
 John G. Clem  
 Wm. M. McClarin

## FRATERNITY LUNCHEON COMMITTEE:

Chas. F. Wood, Chairman  
 Spafford Ackerly  
 Chas. M. Edelen  
 John W. Fish  
 Meyer M. Harrison  
 Raymond Heitz  
 Carlisle Morse

## WOMEN PHYSICIANS' COMMITTEE:

Frieda Berresheim, Chairman  
 Margaret Limper  
 Alice Wakefield

## TRAP SHOOTING COMMITTEE:

G. L. Dyer, Chairman  
 J. W. Fitch  
 Ben H. Hollis  
 James S. Lutz

## GOLF COMMITTEE:

R. Glen Spurling, Chairman  
 Albert Bass  
 Joseph C. Bell  
 Winston U. Rutledge  
 Wm. C. Wolfe

## WOMAN'S AUXILIARY COMMITTEE:

Thomas J. Crice, Chairman  
 S. C. McCoy  
 L. Lyne Smith

## HOBBY COMMITTEE:

Jesshill Love, Chairman  
 Benjamin F. Aydelotte  
 Marion F. Beard  
 Nora D. Dean  
 R. Glen Spurling  
 Paul A. Turner

TECHNICAL EXHIBITORS AT THE  
LOUISVILLE MEETING

The following is a list of space number, firm and address of exhibitors at the Louisville meeting:

1. Petrolagar Laboratories, Chicago, Illinois.
2. Brooks Denhard Surgical Instrument Co., Louisville.
3. Dick X-Ray Company, Louisville.
4. Gilliland Laboratories, Inc., Marietta, Pa.
5. Theo. Tafel, Louisville.
6. J. A. Majors Company, New Orleans, La.
7. Mead Johnson & Company, Evansville, Indiana.
8. Burroughs Wellcome & Co., New York, N. Y.
9. The Medical Protective Company, Fort Wayne, Indiana.
10. Max Wocher & Son Company, Cincinnati, Ohio.
11. The Borden Company, New York, N. Y.
12. Smith, Kline & French Laboratories, Philadelphia, Pa.
13. General Electric X-Ray Corporation, Indianapolis, Indiana.
14. Lederle Laboratories, Inc., New York, N. Y.
15. A. S. Aloe Company, St. Louis, Missouri.
16. Parke, Davis & Company, Detroit, Michigan.
17. American Hospital Supply Corporation, Chicago, Illinois.
18. John Wyeth & Brother, Philadelphia, Pa.
19. Philip Morris & Company, New York, N. Y.
20. Gerber Products Company, Fremont, Michigan.
21. Eli Lilly and Company, Indianapolis, Indiana.
22. V. Mueller & Company, Chicago, Illinois.

## PROGRAM OF THE KENTUCKY SOCIETY OF MEDICAL TECHNOLOGISTS

The fourth annual meeting of the Kentucky Society of Medical Technologists will be held on Sunday and Monday, September 28, 29, 1941 with headquarters at the Kentucky Hotel in Louisville. Sunday afternoon will be devoted to the entertainment program, details of which will be announced later. The program of the scientific session on Monday is as follows:

- 9:00 A. M. Registration, Kentucky Hotel.
- 9:30 A. M. Call to Order. Business Session.
- 10:30 A. M. Photomicrography and Other Photography in the Clinical Laboratory, Oscar M. Alton, Norton Memorial Infirmary, Louisville.
- 11:00 A. M. Aspiration of Sternal Marrow: Technic, Indications, and Limitations, Harold Gordon, M. D., Associate Professor of Pathology, School of Medicine, University of Louisville.
- 12 to 1:00 P. M. Luncheon, Speaker Morris Flexner, M. D., Louisville.
- 1:15 P. M. Enteric Pathogens: Their Isolation and Identification, J. A. Kennedy, Ph. D., Professor of Public Health and Bacteriology, School of Medicine, University of Louisville.
- 2:00 P. M. Blood Proteins, Eunice Greenwood, M. D., Pathologist of Norton Memorial Infirmary, Louisville.
- 2:30 P. M. Business Session. Election of Officers.

After the business session there will be time for visiting the Serological and Bacteriological Laboratories of the Louisville City Hospital and the State Board of Health, up until 5:00 P. M.

Although membership in the Kentucky Society of Medical Technologists is open only to those holding certificates from the Registry of Medical Technologists of the American Society of Clinical Pathologists, they shall be happy to have all those interested in our field to attend the meeting as guests. They particularly wish to invite the students of the various schools of Laboratory Technique throughout the state to be with us in September.

## THERE ARE NO MORE

In June 1938 the serological department of the State Department of Health was moved from Lexington to Louisville and to efficiently carry on this work there were purchased 46,000 complete Kahn containers at a price of approximately \$4,000. The chief point of efficiency of these containers is the inside aluminum carton which does

not bend easily and is readily adjusted and has proven more satisfactory, after a thorough trial, than other types of containers. At that time the European War seemed remote. Now, however, its effect upon our civilization is brought sharply to our attention when the Government placed an embargo upon aluminum, and we are now unable to procure any more aluminum inside Kahn containers. A sufficient number was purchased to supply the state indefinitely as they are indestructable, but they have a habit of hiding themselves in doctors' offices where they cannot be found and seem to disappear from circulation forever. To avoid this calamity, the State Department of Health has adopted an accounting system whereby each doctor is charged Fifty Cents (50c) for each container and when that container has been returned he is credited for it. He will be asked to make an inventory every six months and will have to pay for these containers that he cannot account for or has lost. This is the only method we can devise that will always secure an adequate number of containers for the physicians in Kentucky. Since the establishment of this department, all orders have been filled and we will continue to do so as long as these containers are in circulation. These containers can be used only for blood specimens for the State Department of Health Laboratories. It is a violation of the law to use them for private purposes.

## CHANGE IN THE CONSTITUTION AND BY-LAWS

In accordance with the provision of the Constitution and By-laws, the following changes which were offered at the Lexington meeting are published so that they may be acted upon at the Louisville session.

### CONSTITUTION

#### Article VIII, Section I.

Amend to read: The Officers of the Association shall be a President, President-Elect, three Vice-Presidents, a Secretary, a Treasurer and eleven Councilors.

#### Section 2. Amend to read:

The President-Elect and the Vice Presidents shall be elected for a term of one year. The Secretary, Treasurer, and the Councilors shall be elected for terms of five years each, Councilors being divided into classes; that two shall be elected each year except for each fifth year when three shall be elected. All of these officers shall serve until their successors are elected and installed.



## Section 3.

The Officers of the Association shall be elected by the House of Delegates on the last day of the Annual Session, but no Delegate shall be eligible to any office named in the preceding section except that of Councilor, and no person shall be eligible to any office who has not been a member of the Association for the past two years.

## BY-LAWS

## Chapter 1. Section 2. Honorary Members.

Any physician possessed of scientific attainments who is a member of a constituent State Medical Association of the American Medical Association, and who has participated in the Program of the Scientific Session and who is not a citizen of Kentucky may, by unanimous vote of the House of Delegates be elected to honorary membership. Honorary members shall be entitled to the privileges of the floor in all scientific sessions.

Make present Section 1, Section 3.

Make present Section 2, Section 4.

Make present Section 3, Section 5.

Make present Section 4, Section 6.  
Section 1.

Change the first sentence to read:

Section 1. The general meeting shall include all registered members, honorary members and guests who shall have equal right to participate in the scientific proceedings and discussions.

Add to By-Laws, Chapter IV, at the end of Section 1, the following paragraph:

The House of Delegates may be called into special session by the President with the approval of the Council, and a special session of the House of Delegates shall be called by the President on written request of the Delegates representing fifty or more component county societies. When such special session is called, the Secretary shall mail a notice of the time and place and the purpose of such meeting to the last known address of each member of the House of Delegates at least ten days before such special session.

## Chapter IV. Section 8.

Amend so as to read:

Section 8. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the constitution and by-laws of that body.

## Chapter V. Section 4.

Amend so as to read:

Section 4. Nomination for President-Elect shall be called for by counties.

## Chapter 6. Section 2.

Add a new section.

Section 2. The President-Elect shall be the Chairman of the Committee on scientific work, and shall appoint one active member of the Association to serve on this Committee. He shall become the President of the Association at the next annual meeting of the Scientific Session following his election as President-Elect. He shall assist the President in visitation of county and other meetings and shall be ex-officio a member of the House of Delegates with the right to vote. In the event of death, resignation, or if he becomes permanently disqualified, his successor shall be elected by the House of Delegates and shall be installed as President of the Association at the next annual meeting of the Scientific Session of the Association.

Make present Section 2, Section 3.

Make present Section 3, Section 4.

Amend the last paragraph of Section 3 by transferring this paragraph to be the first paragraph of Chapter VII, Section 1, so that the first paragraph of Chapter VII, Section 1 will read as follows:

Section 1. Council shall be the Executive Body of the House of Delegates and between sessions shall exercise the power conferred on the House of Delegates by the Constitution and By-Laws.

Make present Section 4, Section 5.

## Chapter VIII. Add new Section 6.

Section 6. The Committee on Medical Education shall consist of three members who have been appointed by the President and shall serve for one year. It shall prepare a report covering its activities during the year to be presented to the House of Delegates.

## OFFICIAL CALL

THE KENTUCKY STATE MEDICAL ASSOCIATION  
TO BE HELD IN THE BROWN HOTEL  
LOUISVILLE, KENTUCKY

To the officers and members of the Component County Societies of the Kentucky State Medical Association.

The William Talbot Owen Memorial Meeting of the Kentucky State Medical Association will convene in the Brown Hotel, Louisville, Monday, Tuesday, Wednesday and Thursday, September 29, 30, October 1, 2, 1941.

## THE HOUSE OF DELEGATES

The House of Delegates of the Kentucky State Medical Association will convene in the Ball Room of the Brown Hotel at 2:00 P. M. and at 7:30 P. M. on Monday, September 29, 1941.

## FIRST SESSION

The First General Session, which constitutes the opening exercises of the scientific function of the Association, will be held in the Ball Room of the Brown Hotel, Tuesday, September 30, at 9:00 A. M.

## THE COUNCIL

The Council will convene in the Louis XIV room of the Brown Hotel, Monday, September 29, at 10:30 A. M.

The Registration Department will be open in the South Room from 10:00 A. M. to 5:00 P. M. on Monday, September 29; from 8:30 A. M. to 6:00 P. M. Tuesday and Wednesday, September 30th and October 1; and from 8:30 A. M. to 12:00 Noon on Thursday, October 2, 1941.

## COUNCILOR DISTRICTS

## FIRST DISTRICT

V. A. Stilley, Benton, Councilor	Fulton	Lyon
Ballard	Graves	McCracken
Caldwell	Hickman	Marshall
Calloway	Livingston	Trigg
Carlisle		
Crittenden		

## SECOND DISTRICT

D. M. Griffith, Owensboro, Councilor	Hopkins	Ohio
Daviess	McLean	Union
Hancock	Muhlenberg	Webster
Henderson		

## THIRD DISTRICT

C. C. Turner, Glasgow, Councilor	Cumberland	Simpson
Allen	Logan	Todd
Barren	Metcalf	Warren-Edmonson
Butler	Monroe	
Christian		

## FOURTH DISTRICT

J. I. Greenwell, New Haven, Councilor	Hardin	Meade
Breckinridge	Hart	Nelson
Bullitt	Larue	Spencer
Grayson		

## FIFTH DISTRICT

J. B. Lukins, Louisville, Councilor	Henry	Owen
Carroll	Jefferson	Shelby
Franklin	Oldham	Trimble
Gallatin		

## SIXTH DISTRICT

W. B. Atkinson, Campbellsville, Councilor	Green	Taylor
Adair	Marion	Washington
Anderson	Mercer	
Boyle		

## SEVENTH DISTRICT

V. G. Kinnaird, Lancaster, Councilor	Lincoln	Rockcastle
Casey	McCreary	Russell
Clinton	Pulaski	Wayne
Garrard		

## EIGHTH DISTRICT

Luther Bach, Bellevue, Councilor	Fleming	Mason
Boone	Grant	Nicholas
Bracken-Pendleton	Harrison	Robertson
Campbell-Kenton		

## NINTH DISTRICT

Proctor	Sparks, Ashland, Councilor	
Boyd	Greenup	Magoffin
Carter	Johnson	Martin
Elliott	Lawrence	Fike
Floyd	Lewis	

## TENTH DISTRICT

C. A. Vance, Lexington, Councilor	Jessamine	Owsley
Bath	Lee	Powell
Bourbon	Madison	Rowan
Breathitt	Menifee	Scott
Clark	Montgomery	Wolfe
Estill	Morgan	Woodford
Fayette		

## ELEVENTH DISTRICT

H. K. Buttermore, Liggett, Councilor	Jackson	Laurel
Bell	Knox	Leslie
Clay	Knott	Whitley
Harlan		

# CONSTITUTION AND BY LAWS OF THE KENTUCKY STATE MEDICAL ASSOCIATION ADOPTED AT PA- DUCAH IN 1902 AS AMENDED CONSTITUTION

## ARTICLE I. NAME OF THE ASSOCIATION

The name and title of this organization shall be the Kentucky State Medical Association.

## ARTICLE II. PURPOSE OF THE ASSOCIATION

The purpose of the Association shall be to federate and bring into compact organization the entire medical profession of the State of Kentucky and to unite with similar associations in other states to form the American Medical Association, with a view to the extension of medical knowledge, and to the advancement of medical science, to the elevation of the standard of medical education and to the enactment and enforcement of just medical laws; to the promotion of friendly intercourse among physicians, and to the guarding and fostering of their material interest and to the enlightenment and direction of public opinion in regard to the great problem of state medicine, so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

## ARTICLE III. COMPONENT SOCIETIES

Component societies shall consist of those county medical societies which hold charters from this Association.

## ARTICLE IV. COMPOSITION OF THE ASSOCIATION

Section 1. This Association shall consist of Members, Delegates and Guests.

Section 2. MEMBERS. The members of this Association shall be the members of the component county medical societies.

Section 3. DELEGATES. Delegates shall be those members who are elected in accordance with this Constitution and By-laws to represent their respective component county societies in the House of Delegates of this Association.

Section 4. GUESTS. Any distinguished physician not a resident of this State may become a guest during any Annual Session upon invitation of the Association or its Council, and shall be accorded the privilege of participating in all of the scientific work of that session.

## ARTICLE V. HOUSE OF DELEGATES

The House of Delegates shall be the legislative and business body of the Association, and shall consist of (1) Delegates elected by the component county societies,



(2) *ex-officio*, the officers of the association as defined in Article VIII, Section 1, of this Constitution and (3) the five immediate past presidents.

#### ARTICLE VI. SECTIONS AND DISTRICT SOCIETIES

The House of Delegates may provide for a division of the scientific work of the Association into appropriate Sections and for the organization of such Councilor District Societies as will promote the best interest of the profession, such societies to be composed exclusively of members of component county societies.

#### ARTICLE VII. SESSIONS AND MEETINGS

Section 1. The Association shall hold an Annual Session, during which there shall be held daily not less than two General Meetings, which shall be open to all registered members, delegates and guests.

Section 2. The time and place for holding each annual session shall be fixed by the House of Delegates.

#### ARTICLE VIII. OFFICERS

Section 1. The officers of this Association shall be a President, three Vice-Presidents, a Secretary, a Treasurer, and eleven Councilors.

Section 2. The President and Vice-Presidents shall be elected for a term of one year. The Secretary, Treasurer and Councilors shall be elected for terms of five years each; the Councilors being divided into classes so that two shall be elected each year. All these officers shall serve until their successors are elected and installed.

Section 3. The officers of the Association shall be elected by the House of Delegates on the morning of the last day of the Annual Session but no Delegates shall be eligible to any office named in the preceding section, except that of Councilor and no person shall be elected to any such office who is not in attendance upon the Annual Session, and who has not been a member of the Association for the past two years.

#### ARTICLE IX. FUNDS AND EXPENSES

Funds for meeting the expenses of the Association shall be arranged for by the House of Delegates by an equal per capita assessment upon each county society to be fixed by the House of Delegates, by voluntary contribution, and from the profits of its publication. Funds may be appropriated by the House of Delegates to defray the expenses of the Annual Session, for publication and for such other purposes as will promote the welfare of the Association and profession.

#### ARTICLE X. REFERENDUM

The General Meeting of the Association may, by a two-thirds vote, order a general referendum upon any question pending before the House of Delegates, and the House of Delegates may, by a similar vote of its own members, or after a like vote of the General Meeting, submit any such question to the membership of the Association for a final vote; and if the persons voting shall comprise a majority of all the members, a majority of such vote shall determine the question and be binding upon the House of Delegates.

#### ARTICLE XI. THE SEAL

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

#### ARTICLE XII. AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at that Annual Session, provided that such amendment shall have been presented in open meeting at the Previous Annual Session, and that it shall have been sent officially to each component county society at least two months before the session at which final action is to be taken.

#### BY-LAWS

##### CHAPTER 1. MEMBERSHIP

Section 1. All members of the Component County Societies shall be privileged to attend all meetings and take part in the proceedings of the Annual Session, and shall be eligible to any office within the gift of the Association. PROVIDED, that no physician may become a member of any county society unless he signs and keeps inviolate the following pledge:

I hereby promise upon my honor as a gentleman that I will not so long as I am a member of the Kentucky State Medical Association practice division of fees in any form; neither by collecting fees from others referring patients to me, nor by permitting them to collect fees from me, nor will I make joint fees with physicians or surgeons referring patients to me for operation or consultation; neither will I in any way, directly or indirectly, compensate anyone referring patients to me nor will I utilize any man as an assistant as a subterfuge for this purpose.

Section 2. The name of a physician upon the properly certified roster of members, or list of delegates, of a chartered county society which has paid its annual assessment, shall be *prima facie* evidence of his

right to register at the Annual Session in the respective bodies of this Association.

Section 3. No persons who are under sentence or suspension or expulsion from any component society of this Association, or whose name has been dropped from its rolls of membership shall be entitled to any of the rights or benefits of this Association, nor its proceedings until such time as he has been relieved of such liability.

Section 4. Each member in attendance at the Annual Session shall enter his name on the registration book indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that session. No member or delegate shall take part in any of the proceeding of an annual session until he has complied with the provisions of this section.

#### CHAPTER II. ANNUAL AND SPECIAL SESSION OF THE ASSOCIATION

Section 1. The Association shall hold an annual session, meeting every third year in the city of Louisville, and the other two years at some point in the State fixed at the preceding annual session.

#### CHAPTER III. GENERAL MEETING

Section 1. The General Meeting shall include all registered members, delegates, and guests, who shall have equal rights to participate in the proceedings and discussions, and except guests, to vote on pending questions. Each General Meeting shall be presided over by the President or in his absence or disability or upon his request, by one of the Vice-Presidents. Before it, at such time and place as may have been arranged, shall be delivered the annual address of the President, and the annual orations and the entire time of the sessions as far as may be, shall be devoted to papers and discussions relating to scientific medicine.

Section 2. The General Meeting shall have authority to create committees or commissions for scientific investigation of special interest and importance to the profession and public, and to receive and dispose of reports of the same; but any expense in connection therewith must first be approved by the House of Delegates.

Section 3. Except by special vote, the order of exercises, papers and discussions as set forth in the official program shall be

followed from day to day until it has been completed.

Section 4. No address or paper before the Association except those of the President and orators shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes, nor more than once on any subject.

Section 5. All papers read before the Association shall be its property. Each paper shall be deposited with the Secretary when read and if this is not done it shall not be published.

#### CHAPTER IV. HOUSE OF DELEGATES

Section 1. The House of Delegates shall meet annually at the time and place of the Annual Session of the Association and shall so fix its hours of meeting as not to conflict with the first General Meeting of the Association, or with the meeting held for the address of the President and the annual orations so as to give delegates an opportunity to attend the other scientific proceedings and discussions so far as is consistent with their duties. But if the business interest of the association and profession require, it may meet in advance or remain in session after the final adjournment of the General Meeting.

Section 2. Each component county society shall be entitled to send to the House of Delegates each year one delegate for every twenty-five members, and one for each major fraction thereof, but each county society holding charter from the Association, which has made its annual report and paid its assessments as provided in this Constitution and By-Laws shall be entitled to one delegate. In case the regularly elected delegate or alternate is unable to attend the annual meeting of the Association, the President of the county society may in writing appoint an alternate, who shall have the rights and privileges of a delegate.

Section 3. A majority of the registered delegates shall constitute a quorum and all of the meetings of the House of Delegates shall be open to members of the Association.

Section 4. It shall, through its officers, Advisory Council, and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each Annual Session a stepping stone to further ones of higher interest.

Section 5. It shall consider and advise as to material interest of the profession, and of the public in those important matters wherein it is dependent upon the pro-



fession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse popular information in relation thereto.

Section 6. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality and shall continue these efforts until every physician in every county of the State who can be made reputable, has been brought under medical society influence.

Section 7. It shall encourage post-graduate work in medical centers as well as home study and research and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies. With these ends in view, five years after the adoption of the By-Laws, no voluntary paper shall be placed upon the annual program nor be heard in the Association which has not first been read in the county society of which the author is a member.

Section 8. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body, in such manner that not more than one-half of the delegates shall be elected in any one year.

Section 9. It shall upon application provide and issue charters to county societies organized to conform to the spirit of the Constitution and By-Laws.

Section 10. In sparsely settled sections it shall have authority to organize the physicians of two or more counties to be designated by hyphenating the names of two or more counties so as to distinguish them from district and other classes of societies and these societies, when organized and chartered shall be entitled to all the privileges and representation provided therein for county societies, until such counties may be organized separately.

Section 11. It may divide the counties of the State into Councilor Districts, and, when the best interests of the Association and profession will be promoted thereby, organize in each district a medical society, to meet midway between the annual sessions of the Association, and members of

the chartered county societies and none other shall be members.

When so organized from the presidents of such district societies shall be chosen the Vice-Presidents of this Association and the Presidents of the county societies of the district shall be Vice-Presidents of such district societies.

Section 12. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

Section 13. It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

Section 14. It shall present a summary of its proceedings to the last General Meeting of each Annual Session, and shall publish the same in the Journal.

#### CHAPTER V. ELECTION OF OFFICERS

Section 1. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect, provided, however, that when there are more than two nominees the nominee receiving the least number of votes on the first ballot shall be dropped and the balloting continue until an election occurs in like manner.

Section 2. Any member known to have directly or indirectly solicited votes for, or sought any office within the gift of this Association shall be ineligible for any office for two years.

Section 3. The election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day of the General Session.

Section 4. Nominations for President shall be called for by counties.

#### CHAPTER VI. DUTIES OF OFFICERS

Section 1. The President shall preside at all meetings of the Association and of the House of Delegates; shall appoint all committees not otherwise provided for; shall deliver an annual address at such time as may be arranged; shall give a deciding vote in case of a tie, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office and so far as practicable, shall visit by appointment, the various sections of the State and assist the Councilors in building up the county societies and in

making their work more practical and useful.

Section 2. The Vice-Presidents shall assist the President in the discharge of his duties. In the event of his death, resignation or removal, the Council shall elect one of the Vice-Presidents to succeed him.

Section 3. The Treasurer shall give bond for the trust imposed in him whenever the House of Delegates shall deem it requisite. He shall demand and receive all funds due the association, together with the bequests and donations. He shall, under the direction of the House of Delegates, sell or lease any real estate belonging to the Association and execute the necessary papers and shall in general subject to such direction have the care and management of the fiscal affairs of the Association. He shall pay money out of the Treasury only on written order of the President, countersigned by the Secretary; he shall subject his accounts to such examination as the House of Delegates may order, and he shall annually render an account of his doings and of the state of funds in his hands.

Section 4. The Secretary, acting with the Committee on Scientific Work, shall prepare and issue the program for and attend all meetings of the Association and of the House of Delegates and he shall keep minutes of their respective proceedings in separate record books. He shall charge upon his books the assessments against each component county society at the end of the fiscal year; he shall collect and make proper credits for the same and perform such other duties as may be assigned him. He shall be custodian of all record books and papers belonging to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the association which come into his hands. He shall provide for the registration of the members and delegates at the Annual Session. He shall keep a card index register of all local practitioners of the State by counties, noting on each his status in relation to his county society and upon request shall transmit a copy of this list to the American Medical Association for publication. In so far as it is in his power he shall use the printed matter, correspondence and influence of his office to aid the Councilors in the organization and improvement of the county societies and in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notify members of meetings, officers of their election, and committees of their appointments and du-

ties. He shall act as secretary of the Committee on Scientific Work. He shall be editor of the KENTUCKY MEDICAL JOURNAL. He shall employ such assistants as may be ordered by the Council or the House of Delegates. He shall annually make a report of his doings to the House of Delegates.

In order that the Secretary may be enabled to give that amount of his time to his duties which will permit of his becoming proficient it is desirable that he shall receive some compensation. The amount of his salary shall be fixed by the House of Delegates.

#### CHAPTER VII. THE COUNCIL

Section 1. The Council shall be the executive body of the House of Delegates and between sessions shall exercise the powers conferred on the House of Delegates by the Constitution and By-Laws.

Section 2. The Council shall hold daily meetings during the annual session of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three councilors. It shall meet on the last day of the Annual Session of the Association for reorganization and for the outlining of the work for the ensuing year. At this meeting it shall elect a chairman and secretary and it shall keep a permanent record of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided, which report shall include an audit of the account of the Secretary and Treasurer and other agents of this Association and shall also specify the character and cost of all the publications of the Association during the year, and the amounts of all other property belonging to the Association, or under its control, with such suggestions as it may deem necessary. In the event of a vacancy in any office the Council may fill the same until the annual election.

Section 3. Each Councilor shall be organizer, peacemaker and censor for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his doings, and of the condition of the profession of each county in his district to each Annual Session of the House of Delegates. The necessary traveling expenses incurred by Councilor in the line of his duties herein imposed may



be allowed by the House of Delegates upon a proper itemized statement, but this shall not be construed to include his expense in attending the Annual Session of the Association.

Section 4. Collectively the Council shall be the Board of Censors of the Association. It shall consider all questions involving the right and standing of members, whether in relation to other members, to the component societies or to this Association. All questions on an ethical nature brought before the House of Delegates of the General Meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or a county society upon which appeal is taken from the decision of an individual Councilor. Its decision in all such cases shall be final.

Section 5. The Council shall have the right to communicate the views of the profession and of the Association in regard to health, sanitation and other important matters to the public and the lay press. Such communications shall be officially signed by the chairman and secretary of the Council as such.

Section 6. The Council shall provide for and superintend the publication and distribution of all proceedings, transactions and memoirs of the Association and shall have authority to appoint such assistants to the editors as it deems necessary. It shall manage and conduct the *KENTUCKY MEDICAL JOURNAL*, which is the organ of the Association, and all money received by the *JOURNAL*, the Council or any officer of the Association, shall be paid to the Treasurer of the Association on the first of each month.

Section 7. All reports on scientific subjects and all scientific discussions and papers read before the Association shall be referred to the *KENTUCKY MEDICAL JOURNAL*, for publication. The editor, with the consent of the Councilor for the District in which he presides, may curtail or abstract papers or discussions, and the Council may return any paper to its author which it may not consider suitable for publication.

Section 8. All commercial exhibits during the Annual Session shall be within the control and direction of the Council.

#### CHAPTER VIII. COMMITTEES

Section 1. The standing committees shall be as follows:

A Committee on Scientific Work.

A Committee on Public Relations.

A Committee on Medical Education.

A Medico-Legal Committee.

A Committee on Arrangements, and such other committees as may be necessary. Such committees shall be elected by the House of Delegates, unless otherwise provided.

Section 2. The Committee on Scientific Work shall consist of three members of which the President-elect shall be a member and Chairman and the Secretary shall be a member and Secretary and shall determine the character and scope of the scientific proceedings of the Association, subject to the provisions or the instructions of the House of Delegates or of the Association or to the provisions of the Constitution and By-Laws. Thirty days previous to each annual session it shall prepare and issue a program announcing the order in which papers, discussions and other business shall be presented which shall be adhered to by the Association as nearly as practicable.

Section 3. The Committee on Public Relations shall consist of three members and the President and Secretary. Under the direction of the House of Delegates it shall represent the Association in securing and enforcing legislation in the interest of the public health and scientific medicine. It shall keep in touch with the profession and public opinions, shall endeavor to shape legislation so as to secure the best results for the whole people and shall utilize every organized influence in local, state and national affairs and elections. Its work shall be done with dignity becoming a great profession and with that wisdom which will make effective its work and influence. It shall have authority to be heard before the entire Association upon questions of great concern at such times as may be arranged during the annual session.

Section 4. The Committee on Arrangements shall consist of the component society in the territory in which the annual session is to be held. It shall by committees of its own selection, provide suitable accommodations for the meeting places of the Association and of the House of Delegates, and of their respective committees and shall have general charge of all arrangements. Its Chairman shall report an outline of the arrangements to the Secretary for publication in the program and shall make additional announcements during the session as occasion may require.

Section 5. The Medico-Legal Committee

shall consist of three members, one of whom, the Chairman, shall be elected by the Council for five years, and the Secretary and Treasurer shall be the other two members *ex-officio*. This committee shall select and fix the compensation for an attorney, who shall act as General Counsel, and if required, additional local counsel. The Association through this Committee shall defend its members who are in good standing against unjust suits for malpractice.

#### CHAPTER IX. ASSESSMENTS AND EXPENDITURES

Section 1. The assessment of five dollars per capita on the membership of the component societies is hereby made the annual dues of this Association. The Secretary of each county society shall forward its assessment together with it roster of all officers and members, list of delegates, and list of non-official physicians of the county to the Secretary of this Association on the first day of January in each year.

Section 2. Any county society which fails to pay its assessments, or make the report required, on or before the first day of April in each year, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

Section 3. All motions or resolutions appropriating money shall specify a definite amount or so much thereof as may be necessary for the purpose indicated and must be approved by the Council and House of Delegates.

#### CHAPTER X. RULES OF CONDUCT

The Principles set forth in the Principles of Ethics of the American Medical Association shall govern the conduct of members in their relation to each other and to the public.

#### CHAPTER XI. RULES OF ORDER

The deliberations of this Association shall be governed by parliamentary usage as contained in Roberts Rules of Order, unless otherwise determined by a vote of its respective bodies.

#### CHAPTER XII. COUNTY SOCIETIES

Section 1. All county societies now in affiliation with the State Association or those that may hereafter be organized in this State, which have adopted principles of organization not in conflict with this Constitution and By-Laws shall upon application to the House of Delegates, re-

ceive a charter from and become a component part of this Association.

Section 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charters shall be issued thereto.

Section 3. Charters shall be issued only upon approval of the House of Delegates and shall be signed by the President and Secretary of this Association. The House of Delegates shall have authority to revoke the charter of any component county society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

Section 4. Only one component medical society shall be chartered in any county. When more than one county society exists friendly overtures and concessions shall be made with the aid of the Councilor of the District if necessary and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

Section 5. Each county society shall judge of the qualifications of its own members, but as such societies are the only portals to this Association every reputable and legally registered physician who is practicing, or who will agree to practice non-sectarian medicine shall be entitled to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every physician in the country to become a member.

Section 6. Any physician who may feel aggrieved by the action of the society of the county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, which upon a majority vote may permit him to become a member of an adjacent county society.

Section 7. In hearing appeals, the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a board and as individual councilors in district and county work, effort at conciliation and compromise shall precede all such hearings.

Section 8. When a member in good standing in a component society moves to another county in the State, his name, upon request, shall be transferred without cost to the roster of the county so-



ciety into whose jurisdiction he moves.

Section 9. A physician living in or near a county line may hold membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

Section 10. Each county society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material conditions of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Section 11. Frequent meetings shall be encouraged, and the most attractive programs arranged that are possible. The younger members shall be especially encouraged to do post-graduate and original research work, and to give the society the first benefit of such labors. Official position and other preferences shall be unstintingly given to such members.

Section 12. At the time of the annual election of officers each county society shall elect a delegate or delegates to represent it in the House of Delegates of this Association in the proportion of one delegate to each twenty-five members or major fraction thereof, and the secretary of the society shall send a list of such delegates to the Secretary of this Association at least sixty days before the Annual Session.

Section 13. The Secretary of each county society shall keep a roster of its members and a list of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information, upon blanks supplied him for the purpose, to the Secretary of this Association, on the first day of January of each year, or as soon thereafter as possible, and at the same time that the dues accruing from the annual assessment are sent in. In keeping such roster the Secretary shall note any change in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

Section 14. The Secretary of each county

society shall report to the Kentucky Medical Journal full minutes of each meeting and forward to it all scientific papers and discussions which the society shall consider worthy of publication.

#### CHAPTER XIII. AMENDMENTS

These By-Laws may be amended by any Annual Session by a two-thirds vote of all the delegates present at that session, after the amendment has been laid on the table for one day.

#### CONSTITUTION AND BY-LAWS FOR COUNTY SOCIETIES

PREPARED BY THE COMMITTEE ON ORGANIZATION OF THE AMERICAN MEDICAL ASSOCIATION OF WHICH THE LATE DR. J. N. McCORMACK WAS CHAIRMAN

##### ARTICLE I. NAME AND TITLE OF THE SOCIETY

The name and title of this organization shall be the \_\_\_\_\_ County Medical Society.

##### ARTICLE II. PURPOSE OF THE SOCIETY

The purpose of this society shall be to bring into one organization the physicians of \_\_\_\_\_ County, so that by frequent meetings and full and frank interchange of views they may secure such intelligent unity and harmony in every phase of their labor as will elevate and make effective the opinions of the profession in all scientific, legislative, public health, material and social affairs, to the end that the profession may receive that respect and support within its own ranks and from the community to which its honorable history and great achievements entitle it; and with other county societies to form the \_\_\_\_\_ State Medical Association, and through it, with other state associations, to form and maintain the American Medical Association.

##### ARTICLE III. ELIGIBILITY

Every legally registered physician residing and practicing in \_\_\_\_\_ County who is of good moral and professional standing and who does not support or practice, or claim to practice, any exclusive system of medicine shall be eligible for membership.

##### ARTICLE IV. MEETINGS

Regular meetings shall be held at such time and place as may be determined by the Society.

Special meetings may be called by the President and shall be called on a written request of five members. A call for a special meeting shall state the object of such meeting, at which no business except that stated in the call shall be transacted,

## ARTICLE V. OFFICERS

The officers of this Society shall consist of a President, Vice-President, Secretary, Treasurer, Delegates and Board of three Censors. These officers, except the Delegates and Board of Censors, shall be elected annually. Delegates shall be elected for two years, and in accordance with the constitution and by-laws of the state association, one member of the Board of Censors shall be elected each year to serve for three years, provided that at the first election after the adoption of this constitution one member of the Board shall be elected for one year, one for two, and one for three years.

## ARTICLE VI. FUNDS AND EXPENSES

Funds for meeting the expenses of the Society shall be raised by annual dues, special assessments and voluntary contributions. Funds may be appropriated by vote of the Society for such purposes as will promote its welfare and that of the profession.

## ARTICLE VII. CHARTER

The Society shall apply to the council of the state association for a charter at the meeting at which this constitution and by-laws are adopted, or as soon thereafter as practicable, and the charter shall be kept by the Secretary.

## ARTICLE VIII. INCORPORATION

The Society shall have authority to appoint a Board of Trustees and to provide for articles of incorporation whenever it may deem this necessary.

## ARTICLE IX. AMENDMENTS

The Society may amend any article of this constitution by a two-thirds vote of its members at any regular meeting, provided that such amendment or amendments are not in conflict with the laws and regulations of the state association; provided, also that such amendments shall have been read in open sessions at a previous regular meeting and shall have been sent by mail to each member ten days in advance of the meeting at which final action is to be taken.

## BY- LAWS

## CHAPTER I. MEMBERSHIP

Section 1. The Society shall judge of the qualification of its members, but as it is the only door to the State Medical Association and the American Medical Association for physicians within its jurisdiction, every reputed and legally qualified physician of \_\_\_\_\_ County who does not support or practice or claim to practice, sectarian medicine shall be el-

igible to membership.

Section 2. A candidate for membership shall make application in writing and shall state his age, his college and date of graduation, the place in which he has practiced, and the date of registration in this state. The application must be accompanied by the admission fee and must be endorsed by two members of this Society. It shall be referred to the Board of Censors, who shall inquire into the standing of the applicant, assure themselves that he or she is duly registered according to the laws of the state, and report at the next regular meeting of this Society. Election shall be by ballot, and two thirds of the votes of the members present and voting shall be necessary to elect. The application shall be returned to the Secretary, who shall file it for future reference. Applications for membership from rejected candidates shall not be received within six months of such rejection.

Section 3. A physician, accompanying his application with a transfer card from another component county society of this or any state within 60 days of the issuance of said card shall be admitted without fee on a majority vote of the members present, and without the application being referred to the Board of Censors. Such application may be acted on at the meeting at which it is presented on the vote of three fourths of the members present, otherwise it shall lie over until the next regular meeting. No annual dues for the current year shall be charged against such members provided the same have been paid to the Society from which the applicant comes.

Section 4. A physician residing in an immediately adjoining county may become a member of this Society in like manner and on the same terms as a physician living in this county, by permission of the county society of the county in which the applicant lives.

Section 5. A member in good standing who is free from all indebtedness to this Society, and against whom no charges are pending wishing to withdraw, shall be granted a transfer card. This card shall state the date the member associated himself with the Society, the date of issuance of the card, and shall be signed by the President and Secretary. It shall be accompanied with a copy of the application presented at the time the member joined the Society, for information to the Society to which the member desires to attach



himself.

Section 6. All members shall be equally privileged to attend all meetings and take part in the proceedings, and shall be eligible to any office or honor within the gift of the Society so long as they conform to this constitution and by-laws, including the payment of dues. A member who is under sentence of suspension or expulsion shall not be permitted to take part in any of the proceedings or be eligible to any office until relieved of such disability. And, provided further, that none of the privileges of membership shall be extended to any person not a member of this Society except on a majority vote of the Society in regular meeting.

Section 7. A member who is guilty of a criminal offense or gross misconduct either as a physician or as a citizen, or who violates any of the provisions of this constitution and by-laws, shall be liable to censure, suspension or expulsion. Charges against a member must be made in writing and be delivered to the Secretary, who shall immediately furnish a copy to the accused and to the Chairman of the Board of Censors. The Board of Censors shall investigate the charges on their merits, but no action shall be taken by the Board within ten days of the presentation of the charges to the accused, nor before giving the accused and accusers ample opportunity to be heard. The board shall report (1) that the charges are not sustained; or (2) that the charges are sustained and that the accused be (a) censured, (b) suspended for a definite time, (c) expelled. Censure or suspension shall require a two-thirds vote of the members present and voting and a three-fourths vote of those present and voting shall be required to expell a member. No action shall be taken by the Secretary in such cases until at least six weeks have elapsed since filing of the charge. A member suspended for a definite time shall be reinstated at the expiration of the time.

Section 8. Kindly efforts in the interest of peace, conciliation or reformation, so far as possible and expedient, shall precede the filing of formal charges affecting the character or standing of a member, and the accused shall have opportunity to be heard in his own defense in all trials and proceedings of this nature.

Section 9. Members expelled from this Society for any cause shall be eligible for membership after one year from date of expulsion and on the same terms and in like manner as original applicants.

## CHAPTER II. POWERS AND DUTIES

Section 1. This Society shall have general direction of the affairs of the medical profession of the county, and its influence shall be constantly exerted to better the scientific, material and social condition of every physician within its jurisdiction. Systematic efforts shall be made by each member, and by the Society as a whole, to increase the membership until it embraces every reputable physician in the county.

Section 2. A meeting shall be held at—— p. m. on the —— in each month (or oftener). —— members shall constitute a quorum.

The officers and committee on program shall profit by experiences and by example of other similar societies, and strive to arrange for the most attractive and successful proceedings for each meeting. Crisp papers and discussions and reports of cases shall be arranged for and encouraged, and tedious and profitless proceedings and discussions shall be avoided as far as practicable.

Section 3. Agreements and schedules for fees shall not be made by this Society, but at least one meeting during each year shall be set apart for discussion of the business affairs of the profession of the county, with the view of adopting the best methods for the guidance of all. In all proper ways the public shall be taught that business methods and prompt collections are essential to the equipment of the modern physician and surgeon and that it suffers even more than the profession when this is not recognized.

Section 4. This Society shall endeavor to educate its members to the belief that the physician should be a leader in his community, in character, in learning, in dignified and mannerly bearing, and in courteous and open treatment of his brother physicians, to the end that the profession may occupy that place in its own and the public estimation to which it is entitled.

## CHAPTER III. OFFICERS

Section 1. The officers of the Society shall be elected at the December meeting in each year which shall be known as the annual meeting. Nominations shall be made by informal ballot, and all elections be by ballot. The vote of the majority of all the members present shall be necessary to an election.

Section 2. The President shall preside at the meetings of the Society, and perform such other duties as custom and parliamentary usage may require. He shall

be the real head of the profession in the county during the year, and it shall be his pride and ambition to leave it in better condition as regards both scientific attainments and harmony than at the beginning of his term of office.

Section 3. The Vice-President shall assist the President in the performance of his duties, shall preside in the absence and on his death, resignation or removal from the county, shall succeed to the presidency.

Section 4. The Secretary shall record the minutes of the meetings and receive and care for all records and papers belonging to the Society, including its charter. He shall notify each member of the Society as to the time and place of each meeting, and, whenever possible, give the program for the meeting. He shall keep account of and promptly turn over to the Treasurer all funds of the Society which may come into his hands. He shall make and keep a list of the members of the Society in good standing, noting of each his correct name, address, place and date of graduation, and the date of the certificate entitling him to practice medicine in this State; and in a separate list he shall note the same facts in regard to each legally qualified physician in this county not a member of this Society. It shall be his duty to send a copy of such lists on blank forms furnished him for the purpose, to the Secretary of the state association at such time as may be designated by the state association. In making such lists he shall endeavor to account for each physician who has moved into or out of the county during the year, stating when possible, both his present and past address. At the same time, and with his report of such lists of members and physicians, he shall transmit to the state association his order on the Treasurer for the annual dues of the Society.

Section 5. The Treasurer shall receive all dues and money belonging to the Society from the hands of the Secretary or members and shall pay out the same only on the written orders of the President countersigned by the Secretary.

Section 6. The Delegates shall attend and faithfully represent the members of this Society and the profession of this county in the House of Delegates of the state association, and shall make a report of the proceedings of that body to this Society at the earliest opportunity.

#### CHAPTER IV. COMMITTEES

Section 1. There shall be a Board of Censors as provided in the constitution, a Standing Committee on Program and

Scientific Work, a Committee on Public Health and Legislation, and such special committees as may from time to time be deemed necessary.

Section 2. Board of Censors. This Board shall examine and report on the qualification of applicants for membership subjecting each applicant to such examination as it may deem necessary. It shall investigate charges preferred against a member, and report its conclusions and recommendations to the Society. In case of the absence of a member of the Board the President may appoint such member to fill the vacancy. The senior member of the Board in point of service shall be Chairman of the Board.

Section 3. Committee on Program and Scientific Work. This Committee shall consist of the President, Vice-President and Secretary. It shall be the duty to promote the scientific and social functions of the Society by arranging attractive programs for each meeting by urging each member to take part in the scientific work. It shall stimulate fraternalism and good feeling among the members in every way possible. (Provisions should be made in this Section for the annual luncheons, dinners, etc., which the Committee believes to be an excellent way to bring members together. Such occasions should be made as inexpensive as possible).

Section 4. Committee on Public Health and Legislation. This committee shall consist of three members who shall be appointed annually by the President. It shall be its duty to enforce and support the sanitary and medical laws of the state in this county, to co-operate with the Committee on Public Policy and Legislation of the state association in all matters pertaining to legislation and to prosecute quacks and medical pretenders in this county.

#### CHAPTER V. FUNDS AND EXPENSES

Section 1. The admission fee, which must accompany the application, shall be \$——— and shall include the annual dues for the fiscal year. The admission fee shall be returned if the applicant is not accepted.

Section 2. The annual dues shall be \$——— and shall be payable on January 1 of each year. Any member who shall fail to pay his annual dues by April 1 shall be held as suspended without action on the part of the Society. A member suspended for non-payment of dues shall be restored in full membership on



payment of all indebtedness. Members more than one year in arrears shall be dropped from the roll of members.

Section 3. The fiscal year of this Society shall be from January to December inclusive.

CHAPTER VI. ORDER OF BUSINESS

The order of business shall be as follows:

- 1. Call to order by the President.
- 2. Reading of the minutes of last meeting.
- 3. Clinical cases.
- 4. Papers and discussions.
- 5. Unfinished business.
- 6. Miscellaneous business.
- 7. Announcements.
- 8. Adjournment.

CHAPTER VII. RULES OF ORDER

The deliberation of this Society shall be governed by parliamentary usage as contained in Roberts' Rules of Order, unless otherwise determined by vote.

CHAPTER VIII. PRINCIPLES OF MEDICAL ETHICS

The Principles of Medical Ethics of the American Medical Association shall govern this Society.

CHAPTER IX. AMENDMENT

These by-laws may be amended at any regular meeting by a two-thirds vote provided that such amendment has been read in open session at the preceding regular meeting and a copy of the same has been sent to each member by the Secretary ten days in advance of the meeting at which final action is to be taken.

REPORT OF TREASURER\*

STATEMENT OF ASSETS  
September 1, 1941

Cash—	
Treasurer's Checking Account at the Kentucky Bank and Trust Company, Madisonville, Kentucky (Exhibit A).....	\$ 6,366.86
Treasurer's Savings Account at the Kentucky Bank and Trust Company, Madisonville, Kentucky (Exhibit B).....	9,412.70
Student Loan Fund Account at The Kentucky Bank and Trust Company, Madisonville, Kentucky (Exhibit C).....	289.26
Total Cash.....	\$16,068.82
Bonds and Stocks in Possession of Treasurer (Exhibit D).....	1,759.75
Office Furniture, Etc. (Exhibit E).....	756.46
Miscellaneous Accounts Receivable (Exhibit F)...	623.84
Total Assets.....	\$19,208.87
Less Advance Deposits on Advertising (Exhibit F) .....	981.00
Total Net Assets.....	\$18,227.87

EXHIBIT A

Kentucky State Medical Association  
Reconciliation of Treasurer's Accounts  
for the period from September 1, 1940 to September 1, 1941.

\*Books of Association were audited by Hermerding and Dennis, Certified Public Accountants.

CHECKING ACCOUNT  
THE KENTUCKY BANK AND TRUST COMPANY  
MADISONVILLE

Balance agreeing with Secretary's last report (September 1, 1940) .....	\$ 3,009.33
Receipts from operation of Association and Journal .....	\$17,720.76
Rent—State Department of Health .....	39,750.76
Total .....	\$42,760.09
Receipts—McDowell Memorial Fund Donations.....	12.00
Book Fund .....	240.93
Total amount to be accounted for .....	\$43,013.02
Disbursements for Kentucky State Medical Association and Journal .....	\$14,414.56
Rental—State Department of Health and Kentucky State Medical Association Building .....	22,030.00
McDowell Memorial Expense.....	180.60
Book Fund .....	21.00
	36,646.16

Balance in Treasurer's Checking Account (September 1, 1941) .....	\$ 6,366.86
Reconciliation of above balance with statement received from The Kentucky Bank and Trust Company, Madisonville: Treasurers Checking Account....	\$ 7,504.52
Less Vouchers outstanding, viz:	
132—May 31, 1941—	
Judge Rex Logan, P. M.....	\$ 50.00
156—June 30, 1941—	
Hon. Glenn Hatcher, Sec'y of State.....	1.00
159—July 31, 1941—	
J. F. Blackerby.....	30.00
163—July 31, 1941—Mayne Sullivan.....	2.11
164—July 31, 1941—	
Louisville Postmaster .....	14.30
167—July 31, 1941—	
Woman's Auxiliary, Kentucky State Medical Association.....	18.85
169—Aug. 30, 1941—	
A. T. McCormack .....	135.00
170—Aug. 30, 1941—	
L. H. South .....	90.00
171—Aug. 30, 1941—	
J. F. Blackerby.....	30.00
172—Aug. 30, 1941—	
Elva V. Grant.....	65.00
173—Aug. 30, 1941—	
Elizabeth Conkling .....	50.00
174—Aug. 30, 1941—	
Judge Rex Logan.....	50.00
175—Aug. 30, 1941—	
Woman's Auxiliary Quarterly, Kentucky State Medical Assn.....	1.40
176—Aug. 30, 1941—	
Times-Journal Publishing Company.....	600.00
	\$1,137.66

Balance agreeing with Treasurer's Balance .....	\$6,366.86
Vouchers Nos. 169 through 176 are in the hands of the Secretary to be delivered when due.	

EXHIBIT B  
Kentucky State Medical Association  
Savings Account  
The Kentucky Bank and Trust Company  
Madisonville

Balance agreeing with Secretary's last report, September 1, 1940.....	\$9,384.35
Dividends:	
On Louisville Title Mortgage Company Certificates Nos. 3069 and 1701 .....	\$28.35
Total Dividends.....	28.35

TOTAL .....\$9,412.70

## EXHIBIT C

Student Loan Fund Savings Account  
The Kentucky Bank and Trust Company  
Madisonville

Balance in Student Loan Fund Savings Account, (per Secretary's last report, September 1, 1940.) agreeing with statement, August 1, 1941, received from The Kentucky Bank and Trust Company Madisonville .....	\$147.82
Undeposited Receipts: Received August 6, 1941, in payment of loan made February 10, 1931, and interest in full to date..	141.44
Total .....	\$289.26

## EXHIBIT D

Kentucky State Medical Association  
Bonds and Stocks  
September 1, 1941

Bonds:	
\$1,000.00 United States Savings Bond No. M 139598 D .....	\$ 750.00
Louisville Title Mortgage Company Participation Certificate No. L 7594 Bond No. 3 Early 36768 S. F. ....	\$ 850.00
Less Partial Payment.....	590.25 259.75
Total Bonds .....	\$1,009.75
Stocks:	
Louisville Title Mortgage Company, Common Stock Certificate.....	
No. 3069-81 shs. and Certificate No. 1701—31-100 shs. (Estimated Mar- ket Value \$405.00).....	\$ 750.00
Total Bonds and Stocks.....	\$1,759.75
The above bonds and stocks are held by the Kentucky Bank and Trust Company of Madisonville, in safekeeping for Amphas W. Davis, Treasurer, Madisonville.	

## EXHIBIT E

Invoice of the Property of the Association  
September 1, 1941

38 Bound Volumes Kentucky Medical Journals, 1903-1940.....	\$ 380.00
1 Allen Wales Adding Machine No. 10350 .....	\$ 175.00
Less 70 pct. Depreciation.....	122.50 52.50
1 12" Oscillating Fan.....	16.00
Less 50 pct. Depreciation.....	8.00 8.00
1 Portable Amplifier Complete.....	230.23
Less 20 pct. Depreciation.....	46.05 184.18
500 No. 5 2-cent envelopes, Kentucky State Medical Association, at \$21.96 per M .....	10.98
500 No. 5 3-cent envelopes, Kentucky State Medical Association, at \$31.96 per M .....	15.98
500 No. 8 2-cent envelopes, Kentucky State Medical Association, at \$22.88 per M .....	11.44
500 No. 8 3-cent envelopes, Kentucky State Medical Association, at \$32.88 per M .....	16.44
750 No. 9 2-cent envelopes, Kentucky State Medical Association, at \$23.16 per M .....	17.37
29,000 No. 6-3-4 Non-stamped envelopes, at \$1.04 per M .....	30.16
18,500 No. 10 Non-stamped envelopes, at \$1.59 per M .....	29.41
Total .....	\$ 756.46

## OLD PROPERTY

1 Underwood Typewriter.	
1 Filing Cabinet.	
Rubber Stamps.	
Guide Cards.	
1 Globe Safe with Fixtures.	
1 Cabinet for Addressograph, 36 drawers.	

2 Cabinets for Addressograph, 18 drawers each	
1 Cabinet for Addressograph, 9 drawers	
23 Drawers.	
2,700 Medical Addressograph Plates.	
(All of the property listed under "Old Property" has been fully depreciated, and very little, if anything, could be realiz- ed from the sale of same should a disposition be made of this property.)	

## EXHIBIT F

Kentucky State Medical Association  
Miscellaneous Accounts Receivable

September 1, 1941

Cooperative Medical Advertis- ing Bureau.....	\$333.34
Less Discount .....	80.00 \$253.34
For Advertising Other Than Cooperative .....	\$270.50
Exhibit Space—Brooks Den- hard Surgical Instrument Company .....	100.00
Total Miscellaneous Accounts Receivable .....	\$623.84
For Exhibit Space—Louisville Meeting: .....	945.00
For Advertising Other Than Cooperative: .....	36.00
Total Advance Deposits on Ad- vertising .....	\$981.00

## EXHIBIT G

## RECEIPTS

Checking Account:	
Dues from County Societies (Ex- hibits H and I).....	\$ 9,707.50
Income from Journal (Exhibit J) .....	8,013.26
Total Receipts from Operation in Checking Account .....	\$17,720.76
Rental—State Department of Health (Exhibit K) .....	22,030.00
Total Receipts of Checking Ac- count .....	\$39,750.76
McDowell Memorial Fund:	
Donations for purchase of Mc- Dowell Home and Apothecary Shop (Exhibit L) .....	12.00
Book Fund:	
Sale of "Medicine and Its Develop- ment in Kentucky" (Exhibit N) .....	240.93
Savings Account:	
Dividends on Savings and Invest- ments (Exhibit B) .....	28.35
Student Loan Fund:	
Payment in Full of Loan and Inter- est .....	141.44
Total Receipts—All Funds....	\$40,173.48
Balance on Hand September 1, 1940, McDowell Memorial Fund. \$-1,775.71	
Balance on Hand September 1, 1940, Association Checking Ac- count .....	5,519.63
Balance on Hand September 1, 1940, Savings Account.....	9,384.35
Balance on Hand September 1, 1940, Student Loan Fund.....	147.82
Balance on Hand September 1, 1940, Book Fund.....	734.59
Total Balances, September 1, 1940 .....	12,541.50
Total Receipts and Beginning Bal- ances—All Funds.....	\$52,714.98

## DISBURSEMENTS

Checking Account:	
State Medical Association:	
Secretary's Salary .....	\$ 1,620.00
Secretary's Stenographer's Salary..	780.00
Secretary's Sundries.....	107.23
Refund of Association Dues.....	5.00
Treasurer's Bond .....	12.50
Officers', Councilors and Committee Expenses .....	290.76
Committee on Public Policy Expense	360.00
Attorney's Fees, Medico-Legal Com- mittee .....	500.00
Medico-Legal Committee—Cost and Expenses .....	26.45
Stenographer, Medico-Legal Com- mittee .....	600.00
Postage and Stamped Envelopes...	208.80



Committee on Medical Preparedness		
Expense .....	207.89	
Equipment Account .....	7.22	
Telephone and Telegrams .....	106.06	
Association Sundries .....	100.44	
Louisville Meeting Expenses .....	21.50	
Lexington Meeting Expenses .....	1,440.56	
Pediatric Meeting Expenses .....	7.00	
<hr/>		
Total State Medical Association..		\$ 6,401.41
Kentucky Medical Journal:		
Business Manager's Salary.....	\$ 1,080.00	
Business Manager's Sundries .....	4.00	
Journal Advertisement Collections		
Paid Woman's Auxiliary, Kentuc-		
ky State Medical Association.....	18.85	
Journal Printing.....	6,353.00	
Journal Postage .....	200.00	
Journal Envelopes .....	150.00	
Journal Express and Freight.....	25.31	
Journal Sundries .....	181.99	
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Total Journal.....		\$ 8,013.15
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Total Operation Disbursements...		\$14,414.56
Rental—State Department of Health		
and Kentucky State Medical As-		
sociation Building.....	\$22,030.00	
McDowell Memorial Expense.....	180.60	
Book Fund—"Medicine and Its De-		
velopment in Kentucky" Distribu-		
tion expenses .....	21.00	
<hr/>		
Total Rental, Memorial Expenses,		
and Book Fund.....		\$22,231.60
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Total Checking Account Disburse-		
ments (All Funds).....		\$36,646.16
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DISBURSEMENTS		
Total Disbursements—All Funds..		\$36,646.16
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Balance on Hand this date, Check-		
ing Account .....	\$ 8,825.83	
Balance on Hand this date, Mc-		
Dowell Memorial Fund .....	-1,944.31	
Balance on Hand this date, Sav-		
ings Account .....	9,412.70	
Balance on Hand this date, Stu-		
dent Loan Fund.....	289.26	
Balance on Hand this date, Book		
Fund .....	-514.66	
<hr/>		
Total Balances on Hand this date		
—All Funds.....		\$16,068.82
<hr/>		
Total Disbursements and Ending		
Balances—All Funds.....		\$52,714.98

EXHIBIT H

Detailed list of receipts from County Societies from September, 1940 to September, 1941 compared with income of same peroid last year:

	1940	1941
Adair .....	\$ 35.00	\$ 35.00
Allen .....	35.00	30.00
Anderson .....	30.00	40.00
Ballard .....	25.00	25.00
Barren .....	80.00	95.00
Bath .....	35.00	25.00
Bell .....	143.34	130.00
Boone .....	35.00	20.00
Bourbon .....	75.00	70.00
Boyd .....	180.00	210.00
Boyle .....	85.00	70.00
Bracken-Pendleton .....	55.00	55.00
Breathitt .....	20.00	20.00
Breckinridge .....	35.00	35.00
Bullitt .....	25.00	20.00
Butler .....	5.00	20.00
Caldwell .....	50.00	50.00
Calloway .....	80.00	80.00
Campbell-Kenton .....	625.00	590.00
Carlisle .....	30.00	30.00
Carroll .....	30.00	25.00
Carter .....	40.00	35.00
Casey .....	15.00	25.00
Christian .....	175.00	170.00
Clark .....	95.00	75.00
Clay .....	40.00	30.00
Clinton .....	15.00	15.00
Crittenden .....	35.00	35.00
Cumberland .....	30.00	35.00
Daviss .....	190.00	190.00
Elliott .....		
Estill .....	35.00	35.00
Fayette .....	665.00	610.00
Fleming .....	50.00	55.00
Floyd .....	65.00	55.00
Franklin .....	105.00	100.00
Fulton .....	70.00	65.00
Gallatin .....	5.00	10.00

	1940	1941
Garrard .....	20.00	20.00
Grant .....	60.00	55.00
Graves .....	105.00	120.00
Grayson .....	20.00	40.00
Green .....	30.00	30.00
Greenup .....	45.00	45.00
Hancock .....	5.00	
Hardin .....	100.00	100.00
Harlan .....	230.00	255.00
Harrison .....	65.00	75.00
Hart .....	10.00	65.00
Henderson .....	90.00	80.00
Henry .....	25.00	75.00
Hickman .....	30.00	25.00
Hopkins .....	120.00	105.00
Jackson .....	20.00	15.00
Jefferson .....	2,365.00	2,472.50
Jessamine .....	50.00	55.00
Johnson .....	65.00	90.00
Knott .....		5.00
Knox .....	50.00	50.00
Larue .....	20.00	15.00
Laurel .....	55.00	45.00
Lawrence .....	45.00	40.00
Lee .....	10.00	15.00
Leslie .....		
Letcher .....	125.00	70.00
Lewis .....	10.00	20.00
Lincoln .....	50.00	45.00
Livingston .....	45.00	20.00
Logan .....	75.00	70.00
Lyon .....	20.00	20.00
McCracken .....	205.00	180.00
McCreary .....	45.00	40.00
McLean .....	10.00	45.00
Madison .....	160.00	165.00
Magoffin .....	10.00	10.00
Marion .....	50.00	50.00
Marshall .....	50.00	70.00
Martin .....	5.00	
Mason .....	85.00	65.00
Meade .....	5.00	5.00
Menifee .....	5.00	5.00
Mercer .....	75.00	65.00
Metcalf .....	25.00	25.00
Monroe .....	15.00	20.00
Montgomery .....	50.00	35.00
Morgan .....	20.00	5.00
Muhlenberg .....	85.00	55.00
Nelson .....	55.00	55.00
Nicholas .....	40.00	45.00
Ohio .....	45.00	
Oldham .....		
Owen .....	15.00	20.00
Owsley .....	5.00	20.00
Perry .....	165.00	180.00
Pike .....	115.00	130.00
Powell .....	10.00	15.00
Pulaski .....	105.00	95.00
Robertson .....	15.00	10.00
Rockcastle .....	40.00	35.00
Rowan .....	30.00	30.00
Russell .....	15.00	15.00
Scott .....	75.00	85.00
Shelby .....	75.00	85.00
Simpson .....	35.00	40.00
Spencer .....	10.00	15.00
Taylor .....	30.00	35.00
Todd .....	50.00	40.00
Trigg .....	10.00	30.00
Trimble .....	5.00	
Union .....	60.00	65.00
Warren-Edmonson .....	160.00	175.00
Washington .....	35.00	50.00
Wayne .....	15.00	20.00
Webster .....	55.00	50.00
Whitley .....	110.00	115.00
Wolfe .....	20.00	15.00
Woodford .....	45.00	45.00

\$9,648.34 \$9,707.50

EXHIBIT I

Collections of dues by Secretary on account of Kentucky State Medical Association, corresponding with checks, deposit slips and receipts filed.

1940				
Oct.	1—	To collections	to-date	\$ 190.00
Nov.	1—	To collections	to-date	177.50
Dec.	1—	To collections	to-date	130.00
1941				
Jan.	1—	To collections	to-date	50.00
Feb.	1—	To collections	to-date	1,845.00
Mar.	1—	To collections	to-date	2,385.00
Apr.	1—	To collections	to-date	1,650.00
May	1—	To collections	to-date	2,740.00
June	1—	To collections	to-date	225.00
July	1—	To collections	to-date	242.50
Aug.	1—	To collections	to-date	72.50
Total for Year				\$9,707.50

## EXHIBIT J

Collections by Editor on account of the Journal, corresponding with receipts transferred to the Treasurer as evidenced by checks, deposit slips and receipts on file.

## RECEIPTS FROM ADVERTISING

	Co-operative Gross Amount	Medical Adv. Bureau Deduction	Bureau Net Receipts	Cards Local Advertising, etc.	Profit Distribution by Medical Adv. Bureau	Total from Journal
1940						
September .....	\$ 301.67	\$ 72.40	\$ 229.27	\$ 436.90		\$ 666.17
October .....	617.68	148.24	469.44	1,142.85		1,612.29
November .....	305.34	73.28	232.06	231.51		463.57
December .....	372.34	89.36	282.98	332.13	\$ 408.48	1,023.59
1941						
January .....	259.34	62.24	197.10	304.67		501.77
February .....	308.34	74.00	234.34	215.23		449.57
March .....	317.34	76.16	241.18	263.05		504.23
April .....	333.34	80.00	253.34	149.59		402.93
May .....	271.34	65.12	206.22	397.94		604.16
June .....	356.34	85.52	270.82	908.40		1,179.22
July .....	299.34	71.84	227.50	378.26		605.76
Totals .....	\$3,742.41	\$ 898.16	\$2,844.25	\$ 4,760.53	\$ 408.48	\$ 8,013.26

## EXHIBIT K

## Receipts and Disbursements

In connection with Purchase of State Board of Health and Kentucky Medical Association Building, 620 S. Third Street, Louisville, Kentucky.

## Receipts

From State Board of Health:

1940				
Sept. 5—	To State of Kentucky Treasury Department Check	.....	\$ 2,200	
Nov. 26—	To State of Kentucky Treasury Department Check	.....	4,830	
1941				
Jan. 24—	To State of Kentucky Treasury Department Check	.....	2,500	
Feb. 8—	To State of Kentucky Treasury Department Check	.....	5,000	
May 1—	To State of Kentucky Treasury Department Check	.....	2,500	
July 31—	To State of Kentucky Treasury Department Check	.....	5,000	

Total Amount Received..... \$ 22,030

## Disbursements

1940				
Sept. 5—	Reimbursement to A. T. McCormack, to apply on Note No. 4—			
	Payment on Building.....	\$ 1,780.40		
	Interest due on \$85,827.41.....	419.60	\$ 2,200	
Nov. 29—	Reimbursement to A. T. McCormack, to apply on Note No. 4—			
	Payment on Building.....	3,998.87		
	Interest due on \$84,047.01.....	831.13	4,830	
1941				
Jan. 24—	Reimbursement to A. T. McCormack, to apply on Note No. 4—			
	Payment on Building.....	2,019.71		
	Interest due on \$80,048.14.....	480.29	2,500	
Feb. 29—	Reimbursement to A. T. McCormack, to apply on Notes Nos. 4 & 5			
	Payment on Building.....	4,679.22		
	Interest due on \$78,028.43.....	320.78	5,000	
May 1—	Reimbursement to A. T. McCormack, to apply on Note No. 5—			
	Payment on Building.....	2,011.01		
	Interest due on \$73,349.21.....	488.99	2,500	
July 31—	Reimbursement to A. T. McCormack, to apply on Note No. 5—			
	Payment on Building.....	4,286.62		
	Interest due on \$71,338.20.....	713.38	5,000	
Total Amount Disbursed.....				\$ 22,030.00

## EXHIBIT L

## McDowell Memorial Fund

Balance agreeing with last report, Sept. 1, 1940. \$-1,775.71

## Receipts

Custodians additional donations:	
Fred M. Rankin, M. D., Lexington.....	\$4.00
J. R. Cowan, M. D., Danville.....	4.00
C. A. Vance, M. D., Lexington.....	4.00
Total .....	12.00

Total .....

## Disbursements

Collection of books and other items exhibited in Home.....	\$ 15.00
Transportation of and restoring frame of portrait of Ephraim McDowell.....	165.00
Total Disbursements.....	180.60

Overdrawn balance due Treasurer's Checking Account .....

## EXHIBIT M

Recapitulation of all Donations  
McDowell Memorial Fund

	Custodians	Donors	Total
Members of Kentucky State Medical Association.....	\$ 4,362.00	\$ 558.00	\$ 4,920.00
Fellows of Southern Surgical Association.....	3,175.00	375.00	3,550.00
Fellows of American College of Surgeons.....	2,260.00	1,317.00	3,577.00
Fellows of American College of Physicians.....	600.00	265.00	865.00



Members of Southeastern Surgical Congress.....	100.00	80.00	180.00
American Gynecological Society.....	500.00		500.00
Kentucky State Medical Association.....	500.00		500.00
Miscellaneous .....	300.00	215.88	515.88
Total .....	\$11,797.00	\$2,810.88	\$14,607.88

McDOWELL MEMORIAL FUND

Receipts and Expenditures, January 13, 1936 through August 31, 1941.

EPHRAIM McDOWELL HOME

Donations .....		\$11,220.88	
Expenditures:			
Purchase of Property.....	\$10,000.00		
Original portrait of Ephraim McDowell.....	1,000.00		
Transportation, and restoring frame, portrait of Ephraim McDowell .....	165.60		
Interest on Notes.....	81.17		
150 McDowell Home Models.....	150.00		
Incidental Items for Restoration of Home.....	110.46		
Incidental Items for Dedication.....	175.86		
McDowell Supplement to November 1939 Journal.....	496.13		
Postage and Express.....	553.84		
Collection of Books and Other Items Exhibited in Home.....	146.43		
Telephone, L. D.....	23.75		
Office Expense .....	60.23		
Total Expenditures .....		\$12,963.47	
Overdrawn Balance.....			\$-1,742.59

DOCTOR'S SHOP

Donations .....		\$ 3,387.00	
Expenditures:			
Purchase of Property.....	\$ 3,500.00		
Postage .....	75.33		
Office and Other Expense.....	13.39		
Total Expenditures.....		\$ 3,588.72	
Balance .....			\$-201.72
Total Balance.....			\$-1,944.31

EXHIBIT N

"Medicine and Its Development In  
Kentucky"  
Book Fund

Receipts

Overdrawn Balance due Treasurer's Checking Account agreeing with Treasurer's last report, September 1, 1940					\$734.59
No.	Unit Price	Discount Per Book	C. O. D. Fee	Amount	
39	\$3.50	Net		\$ 136.50	
8	3.50	20 % — .70		22.40	
8	3.50	33 1-3 % — 1.16		18.72	
3	3.50	33 1-3 % — 1.17		6.99	
4	3.00	Net		12.00	
5	3.00	33 1-3 % — 1.00		10.00	
12	3.00	20 % — .60		28.80	
1	3.50	20 % — .70	.22	3.02	
1	3.50	33-1-3 % — 1.17	.17	2.50	
81	Total Sales.....				240.93
Total.....					\$-493.66

Disbursements

Woman's Auxiliary Quarterly paid 20 % commission on sale of books.....				21.00
Overdrawn Balance Due Treasurer's Checking Account.....				-514.00
Detail of Original Publication:				
Total Sale .....	309			
Books donated to W. P. A.....	10			
Books on hand .....	681			
Original publication.....	1,000			

EXHIBIT O

Total membership by Councilor Dis-  
tricts and by Counties for 1941 as com-  
pared to that of 1940.

First District—V. A. Stilley, Benton, Councilor					
1940	1941	Third District—C. C. Turner, Glasgow, Councilor	126	111	
Ballard .....	5	Allen .....	7	6	
Caldwell .....	10	Hopkins .....	21	20	
Calloway .....	16	McLean .....	2	5	
Carlisle .....	6	Muhlenberg .....	16	11	
Crittenden .....	6	Ohio .....	9	0	
Fulton .....	14	Union .....	12	12	
Graves .....	21	Webster .....	9	10	
Hickman .....	6				
Livingston .....	9				
Lyon .....	4				
Marshall .....	10				
McCracken .....	39				
Trigg .....	2				
Second District—D. M. Griffith, Owensboro, Councilor	148				
Daviess .....	38	Fourth District—J. I. Greenwell, New Haven, Councilor	127	132	
Hancock .....	1	Breckinridge .....	6	7	
	0	Bullitt .....	5	4	
		Gravson .....	3	6	
		Hardin .....	20	20	

Hart	1	8
Larue	4	3
Meade	1	1
Neison	11	11
Spencer	1	1

52

61

## Fifth District—J. B. Lukins, Louisville, Councilor

Carroll	6	5
Franklin	20	20
Gallatin	1	1
Henry	5	12
Jefferson	432	461
Oldham		
Owen	3	4
Shelby	15	17
Trimble	1	0

483

520

## Sixth District—W. B. Atkinson, Campbellsville, Councilor

Adair	7	7
Anderson	6	7
Boyle	17	14
Greene	6	6
Marion	10	10
Mercer	14	13
Taylor	6	7
Washington	7	8

73

72

## Seventh District—Virgil Kinnaird, Lancaster, Councilor

Casey	3	4
Cannon	3	3
Garrard	4	4
Lincoln	9	9
McCreary	8	7
Pulaski	21	19
Rockcastle	7	6
Russell	3	3
Wayne	3	4

61

59

## Eighth District—Luther Bach, Bellevue, Councilor

Boone	6	4
Bracken-Pendleton	11	11
Campbell-Kenton	116	115
Fleming	10	11
Grant	12	11
Harrison	13	15
Mason	16	12
Nicholas	8	8
Robertson	3	2

195

189

## Ninth District—Proctor Sparks, Ashland, Councilor

Boyd	36	39
Carter	8	7
Elliott	—	0
Floyd	12	10
Greenup	9	9
Johnson	13	15
Lawrence	9	8
Lewis	2	4
Magoffin	1	2
Martin	1	0
Pike	23	23

114

117

## Tenth District—C. A. Vance, Lexington, Councilor

Bath	6	5
Bourbon	15	14
Breathitt	4	4
Clark	17	15
Estill	7	7
Fayette	126	121
Jessamine	10	11
Lee	2	3
Madison	31	33
Menifee	1	1
Montgomery	10	7
Morgan	4	1
Owsley	1	3
Powell	2	3
Rowan	6	6
Scott	14	17

Wolfe	4	3
Woodford	8	8

268

262

## Eleventh District—H. K. Buttermore, Liggett, Councilor

Bell	26	25
Clay	8	6
Harlan	45	45
Jackson	4	3
Knott	—	1
Knox	10	10
Laurel	10	9
Leslie	—	0
Letcher	24	13
Perry	32	32
Whitley	21	20

District Total.....180

164

Grand Total.....1,827

1,832

## Reconciliation of Membership and Dues Collected for 1940—1941

	Number	Rate	Amount	Total Amount
Current Year Dues..	1,830	\$5.00	\$9,150.00	
Current Year Dues (1-2 Year).....	2	2.50	5.00	
Total Current Year Dues .....	1,832			\$9,155.00
1942 Dues Paid.....	1	5.00		5.00
Delinquent Dues Collected During 1940-41				
First District				
Graves .....	3	5.00	15.00	
Marshall .....	2	5.00	10.00	
Second District				
Daviess .....	1	5.00	5.00	
Hopkins .....	1	5.00	5.00	
McLean .....	4	5.00	20.00	
Union .....	1	5.00	5.00	
Third District				
Barren .....	2	5.00	10.00	
Christian .....	1	5.00	5.00	
Cumberland .....	1	5.00	5.00	
Metcalfe .....	1	5.00	5.00	
Monroe .....	1	5.00	5.00	
Todd .....	1	5.00	5.00	
Warren-Edmonson.....	5	5.00	25.00	
Fourth District				
Grayson .....	2	5.00	10.00	
Hart .....	5	5.00	25.00	
Spencer .....	2	5.00	10.00	
Fifth District				
Gallatin .....	1	5.00	5.00	
Henry .....	3	5.00	15.00	
Jefferson .....	27	5.00	135.00	
Jefferson (1-2 Year).....	15	2.50	37.50	
Sixth District				
Anderson .....	1	5.00	5.00	
Washington .....	2	5.00	10.00	
Seventh District				
Casey .....	1	5.00	5.00	
McCreary .....	1	5.00	5.00	
Rockcastle .....	1	5.00	5.00	
Eighth District				
Campbell-Kenton ...	3	5.00	15.00	
Mason .....	1	5.00	5.00	
Nicholas .....	1	5.00	5.00	
Ninth District				
Boyd .....	3	5.00	15.00	
Floyd .....	1	5.00	5.00	
Johnson .....	3	5.00	15.00	
Pike .....	3	5.00	15.00	
Tenth District				
Fayette .....	1	5.00	5.00	
Owsley .....	1	5.00	5.00	
Woodford .....	1	5.00	5.00	
Eleventh District				
Bell .....	1	5.00	5.00	
Harlan .....	6	5.00	30.00	
Letcher .....	1	5.00	5.00	
Perry .....	3	5.00	15.00	
Whitley .....	3	5.00	15.00	
Total Delinquent Dues Collected.....	117			\$ 547.50
Total Collections .....	1,950			\$9,707.50

## EXHIBIT P

## Secretary's Monthly Balance Sheet, Agreeing With Books.

1940					
Sept. 1	Balance on hand (Checking Account).....	\$ 5,519.63			
	Balance on hand (McDowell Memorial Fund).....	-1,775.71			
	Balance on hand (Book Fund).....	-734.59			
	Total Balance on Hand.....	\$ 3,009.33			
Oct. 1	Association and Journal.....	\$ 2,344.33	Disbursements		Balance
	McDowell Memorial Fund.....	115.60	Collections		
	Book Fund .....	15.40			
	Rent .....	2,200.00			
Nov. 1	Association and Journal.....	1,972.03			1,472.90



	McDowell Memorial Fund.....	50.00		
	Book Fund .....	2.10		
Dec. 1	Association and Journal.....	1,253.16	103.91	1,342.47
	Book Fund .....	2.10	15.24	
	Rent .....	4,830.00	4,830.00	696.02
1941				
Jan. 1	Association and Journal.....	892.94	1,073.59	
	Book Fund .....		8.30	
	Rent .....	2,500.00	2,500.00	884.97
Feb. 1	Association and Journal.....	1,122.33	2,346.77	
	McDowell Memorial Fund.....	15.00		
	Book Fund .....		7.76	2,102.17
March 1	Association and Journal.....	909.99	2,834.57	
	Book Fund .....		2.33	
	Rent .....	5,000.00	5,000.00	4,029.08
April 1	Association and Journal.....	864.99	2,154.23	
	Rent .....	2,500.00	2,500.00	
	Book Fund .....		11.00	5,329.32
May 1	Association and Journal.....	1,099.84	3,142.93	
	Book Fund .....		3.50	7,375.91
June 1	Association and Journal.....	990.30	829.16	
	Book Fund .....		8.34	7,223.11
July 1	Association and Journal.....	932.19	1,421.72	
	Rent .....	5,000.00	5,000.00	
	Book Fund .....		2.34	7,714.98
Aug. 1	Association and Journal.....	1,012.46	678.26	
	Book Fund .....		7.48	7,388.26
Sept. 1	Association and Journal.....	1,020.00		
	Book Fund .....	1.40		6,366.86
	Totals.....	\$36,646.16	\$40,003.69	
Balance on Hand, Sept. 1, 1940:				
	Checking Account.....		5,519.63	
	McDowell Memorial Fund.....		-1,775.71	
	Book Fund .....		-734.59	\$43,013.02
Balance on Hand, Sept. 1, 1941:				
	Association and Journal.....		\$ 8,825.83	
	McDowell Memorial Fund.....		-1,944.31	
	Book Fund .....		-514.66	
	Net Checking Account Balance.....		6,366.86	
	Total Disbursements as above.....		\$36,643.16	\$43,013.02

## EXHIBIT Q

Detailed Statement of Disbursements of A. W. Davis, M. D., Treasurer, Kentucky State Medical Association, each made on a Voucher Check signed by Austin Bell, M. D., President, September 1, 1940 through March 31, 1941 and W. E. Gary, M. D., President, April 1 through August 31, 1941, A. T. McCormack, M. D., Secretary, and himself, from September 1, 1940 through August 31, 1941:

1940				
Sept. 2	Voucher No. 1.....			\$ 2,200.00
	A. T. McCormack, Louisville			
	To reimbursement for rent on building located at			
	620 S. Third St., Louisville:			
	Payment on principal of note due 9-1-41.....		\$ 1,780.40	
	Interest on balance of 6 notes amounting to			
	\$85,827.41.....		419.60	
	Approved by Council and Ordered Paid by House of Delegates....		\$ 2,200.00	
Sept. 14	Voucher Check No. 2.....			50.00
	Eugene N. Heimerdinger, C. P. A., Louisville			
	To auditing records of Dr. A. T. McCormack, Sec-			
	retary, and Dr. A. W. Davis, Treasurer, of the			
	Kentucky State Medical Association for the			
	period beginning September 1, 1939 and end-			
	ing September 1, 1940, and auditing records			
	of Mrs. Luther Bach, Treasurer, of the Wo-			
	man's Auxiliary and Mrs. Wm. H. Emrich,			
	Business Manager of "The Quarterly" for the			
	period from July 5, 1939 to August 1, 1940.....		50.00	
	Approved by Council and Ordered Paid by House of Delegates.			
Sept. 14	Voucher Check No. 3.....			100.50
	Louisville Postmaster, Louisville			
	To Postage, July 18-31, 1940.....		2.89	
	To August postage (Committee on Medical Pre-			
	paredness Expense).....		97.61	
	Approved by Council and Ordered Paid by House of Delegates.		100.50	
Sept. 14	Voucher Check No. 4.....			115.60
	Malcolm Owen, Louisville			
	To expenses of trip, 7-29-8-2-40, to O'Keene, Okla-			
	homa, and return to deliver original portrait			
	of Dr. Ephraim McDowell to Louisville office			
	Total mileage for round trip, 2017 miles at 5c.....		100.85	
	Room and Meals.....		14.75	
	(McDowell Fund Expense).....		115.60	
	Approved by Council and Ordered Paid by House of Delegates			

Sept. 14	Voucher Check No. 5.....		37.58
	Courier-Journal Job Printing Co., Louisville		
	To 2,500 inserts of photograph of Dr. Austin Bell,		
	President, for Annual Number.....	37.00	
	Postage and Insurance .....	.58	
		<u>37.58</u>	
	Approved by Council and Ordered Paid by House of Delegates.		
Sept. 14	Voucher Check No. 6.....		197.13
	F. & V. Manufacturing Co., East Providence, R. I.		
	To 517 Buttons—Lexington 1940—at 25c.....	129.25	
	To 463 Bangles—Lexington 1940—at 14 1-2c.....	67.14	
		<u>196.39</u>	
	Postage and Insurance.....	.74	
		<u>197.13</u>	
Sept. 14	Voucher Check No. 7.....		29.64
	Bush-Krebs Co., Louisville		
	To 20 Proofs of Halftones (for Pediatric Conference)		
	To 5 Halftones—Portraits of Doctors.....	1.00	
	To 1 Halftone—Portrait of Doctor.....	17.00	
	To 1 Multigraph "Signature".....	3.80	
	To 1 Copper Halftone Portrait and Art work on	1.50	
	Same (For State Meeting Program).....	6.34	
		<u>29.64</u>	
	Approved by Council and Ordered Paid by House of Delegates.		
Sept. 14	Voucher Check No. 8.....		2.31
	State Department of Health, Louisville		
	To reimbursement for express, as follows		
	Association:		
	From Madisonville, 7-24-40.....	.25	
	To Birmingham, Alabama, 7-25-40.....	.25	.50
	Journal:		
	From Bowling Green, 7-8-40.....	.73	
	To Bowling Green, 7-16-40.....	1.08	1.81
		<u>2.31</u>	
Sept. 14	Voucher Check No. 9.....		5.40
	State Department of Health, Louisville		
	To reimbursement for long distance calls, as follows:		
	Association:		
	Lexington, 7-1 & 5-40.....	2.75	
	Madisonville, 7-24-40.....	.95	3.70
	Journal:		
	Bowling Green, 7-5 & 22-40.....	1.70	
		<u>5.40</u>	
	Approved by Council and Ordered Paid by House of Delegates		
Sept. 14	Voucher Check No. 10.....		2.50
	The Standard Printing Co., Louisville.		
	To rebinding 1 Volume of Kentucky Medical Journal .....	2.50	
	Approved by Council and Ordered Paid by House of Delegates		
Sept. 14	Voucher Check No. 11.....		747.50
	The Times-Journal Publishing Co., Bowling Green		
	To 2500 September Issue—88 pages.....	652.00	
	To 6 pt Tabular Work.....	75.00	
	To Inserts.....	5.00	
		<u>732.00</u>	
	Less Ck. No. 194 dated 8-31-40—Account of	550.00	
	September Issue.....		
	Less 4 pages charged on August Issue (64 pages	26.00	
	instead of 68).....		576.00
			<u>156.00</u>
	To 2300 October Issue—72 pages.....		504.00
	To 1 M Programs for Lexington Meeting—32 pages .....		87.50
			<u>747.50</u>
	Approved by Council and Ordered Paid by House of Delegates.		
Sept. 30	Voucher Check No. 12.....		158.90
	A. T. McCormack, M. D., Louisville		
	To September salary, Secretary.....	135.00	
	To expense to Lexington Meeting.....	23.90	
		<u>158.90</u>	
	Approved by Council and Ordered Paid by House of Delegates.		
Sept. 30	Voucher Check No. 13.....		96.00
	L. H. South, M. D., Louisville		
	To September salary, Business Manager.....	90.00	
	To reimbursement for postage for mailing out programs of Pediatric Conference at Corbin 7-25-40 .....	6.00	
		<u>96.00</u>	
	Approved by Council and Ordered Paid by House of Delegates.		
Sept. 30	Voucher Check No. 14.....		20.00
	J. F. Blackerby, Louisville		
	To September services rendered Committee on Public Policy .....	30.00	
	Approved by Council and Ordered Paid by House of Delegates.		



85.22

Sept. 30	Voucher Check No. 15.....		
	Elva Grant, Louisville	65.00	
	To September salary, Bookkeeper.....	20.22	
	To expense to Lexington Meeting.....		85.22
	Approved by Council and Ordered Paid by House of Delegates.		50.00
Sept. 30	Voucher Check No. 16.....		
	Elizabeth Conkling, Louisville.....		
	To September salary, Stenographer for Medico- Legal Committee.....	50.00	
	Approved by Council and Ordered Paid by House of Delegates.		1.97
Sept. 30	Voucher Check No. 17.....		
	State Department of Health, Louisville		
	To reimbursement for express.....	1.97	
Sept. 30	Voucher Check No. 18.....		
	State Department of Health, Louisville		
	To reimbursement for long distance calls, for the Association and Journal.....	40.20	
	Approved by Council and Ordered Paid by House of Delegates.		20.00
Sept. 30	Voucher No. 19.....		
	Otho Haskins, Louisville		
	To Honorarium.....	20.00	
	Approved by Council and Ordered Paid by House of Delegates		37.50
Sept. 30	Voucher Check No. 20.....		
	V. A. Stille, Benton		
	To expense as Councilor, 1st District.....	37.50	
	Approved by Council and Ordered Paid by House of Delegates.		37.00
Sept. 30	Voucher Check No. 21.....		
	D. M. Griffith, Owensboro		
	To expense as Councilor, 2nd District.....	37.00	
	Approved by Council and Ordered Paid by House of Delegates.		45.30
Sept. 30	Voucher Check No. 22.....		
	W. B. Atkinson, Campbellsville		
	To expense as Councilor, 6th District.....	45.30	
	Approved by Council and Ordered Paid by House of Delegates.		83.46
Sept. 30	Voucher Check No. 23.....		
	Charles A. Vance, Lexington		
	To expense as Councilor, 10th District.....	83.46	
	Approved by Council and Ordered Paid by House of Delegates.		34.08
Sept. 30	Voucher Check No. 24.....		
	Mayme Sullivan, Louisville		
	To expenses to Lexington Meeting for Self and Stereopticon Operator.....	34.08	
	Approved by Council and Ordered Paid by House of Delegates.		5.95
Sept. 30	Voucher No. 25.....		
	Ray Wunderlich, Louisville		
	To expense to Lexington Meeting.....	5.95	
	Approved by Council and Ordered Paid by House of Delegates.		4.25
Sept. 30	Voucher Check No. 26.....		
	Elizabeth Thomas, Louisville		
	To expense to Lexington Meeting.....	4.25	
	Approved by Council and Ordered Paid by House of Delegates.		5.35
Sept. 30	Voucher Check No. 27.....		
	Emily Stoecker, Louisville		
	To expense to Lexington Meeting.....	5.35	
	Approved by Council and Ordered Paid by House of Delegates.		16.20
Sept. 30	Voucher Check No. 28.....		
	E. H. Roederer, Louisville		
	Councilors and Delegates Badges.....	16.20	
	Approved by Council and Ordered Paid by House of Delegates.		15.40
Sept. 30	Voucher Check No. 29.....		
	Woman's Auxiliary Quarterly, Louisville		
	To 20% Commission on 22 Sales of Book, "Medi- cine and Its Development in Kentucky,".....	15.40	
	Approved by Council and Ordered Paid by House of Delegates.		75.89
Sept. 30	Voucher Check No. 30.....		
	Phoenix Hotel, Lexington		
	To room service for A. T. McCormack, Mayme Sul- livan, Emily Stoecker, Elizabeth S. G. Thomas, Elva Grant and Ray Wunderlich, 9-15-19-40, and official telephone calls and telegrams.....	105.89	
	Less credit for advertisement in July, Aug. and Sept. Journals.....	30.00	
			75.89
	Approved by Council and Ordered Paid by House of Delegates.		344.50
Sept. 30	Voucher Check No. 31.....		
	Jos. T. Griffin Co., Louisville		
	To erecting and dismantling 36 booths for Scientific Exhibits at State Meeting.....	344.50	
	Approved by Council and Ordered Paid by House of Delegates.		50.00
Oct. 4	Voucher Check No. 32.....		
	Lawrence Robison, Louisville		
	To remounting, restoring glass and fitting same for picture of Dr. Ephraim McDowell (McDowell Fund Expense).....	50.00	
Oct. 31	Voucher Check No. 33.....		
	A. T. McCormack, Louisville		
	To October salary, Secretary.....	135.00	
Oct. 31	Voucher Check No. 34.....		
	L. H. South, Louisville		
	To October salary, Business Manager.....	90.00	

To trip to Bowling Green and return in connection with the annual number of the Journal, 8-23-40 .....		4.00	
To trip to Lexington Meeting and return, 9-15-20-40 .....		25.50	29.50
To reimbursement for postage for Marshall County Medical Society letters, 10-3-40 .....			4.00
		123.50	
Oct. 31—	Voucher Check No. 35..... J. F. Blackerby, Louisville To October services rendered Committee on Public Policy .....		30.00
Oct. 31—	Voucher Check No. 36..... Elva Grant, Louisville To October salary, Bookkeeper.....	30.00	65.00
Oct. 31—	Voucher Check No. 37..... Elizabeth Conkling, Louisville To October salary, Stenographer for Medico-Legal Committee .....	65.00	50.00
Oct. 31—	Voucher Check No. 38..... V. A. Stilley, Benton To expenses attending Lexington Meeting, as Coun- cilor, 1st District.....	50.00	23.60
Oct. 31—	Voucher Check No. 39..... H. K. Buttermore, Liggett To expense as Councilor, 11th District.....	23.60	27.50
Oct. 31—	Voucher Check No. 40..... Curtis & Curtis, Attorneys, Louisville To services rendered in case Charles Steinmetz, an infant, by Madlene Steinmetz, next friend, vs. Heman Humphrey.....	27.50	150.00
Oct. 31—	Voucher Check No. 41..... Louisville Postmaster, Louisville To September postage (Committee on Medical Preparedness Expense).....	150.00	46.98
Oct. 31—	Voucher Check No. 42..... State Department of Health, Louisville To reimbursement for express.....	46.98	4.62
Oct. 31—	Voucher Check No. 43..... State Department of Health, Louisville To reimbursement for long distance calls.....	4.62	14.97
Oct. 31—	Voucher Check No. 44..... State Department of Health, Louisville..... To reimbursement for telegrams.....	14.97	1.74
Oct. 31—	Voucher Check No. 45..... The Master Reporting Co., Inc., New York, N. Y. To reporting meeting of the Kentucky State Medi- cal Association, Lexington, 9-16-19-40.....	1.74	392.22
Oct. 31—	Voucher Check No. 46..... Koehler Stam & Stationery Co., Louisville To 1 Signature Stamp, E. L. Henderson.....	392.22	2.95
Oct. 31—	Voucher Check No. 47..... Meffert Equipment Co., Louisville..... To 1 No. 93 Cash Box.....	2.95	1.15
Less 15% .....		1.35 .20	
		1.15	
Oct. 31—	Voucher Check No. 48..... The Pendennis Club, Louisville To luncheons for Council Meeting, 9-1-40.....		20.80
Oct. 31—	Voucher Check No. 49..... Electric Blue Print and Supply Co. Louisville To 10 sheets 2 ply Strathmoor at 20c.....	20.80	2.00
Oct. 31—	Voucher Check No. 50..... Woman's Auxiliary Quarterly, Louisville To 20% commission on 3 sales of book, "Medicine and Its Development in Kentucky," amounting to \$10.50 (Book Fund).....	2.00	2.10
Oct. 31—	Voucher Check No. 51..... To Times-Journal Publishing Co., Bowling Green To 2375 November Issues—116 pages..... To 6 pt..... To 4 pages extra in October Issue (76 pages in- stead of 72 as charged).....	2.10	880.00
		844.00 10.00 26.00	
		880.00	
Nov. 30—	Voucher Check No. 52..... A. T. McCormack, Louisville To November salary, Secretary..... To reimbursement for expense of Council Luncheon Meeting, 11-14-40.....		150.60
		135.00 15.60	
		150.60	
Nov. 30—	Voucher Check No. 53..... L. H. South, Louisville To November salary, Business Manager..... To reimbursement for postage for mailing out programs .....		94.00
		90.00 4.00	
		94.00	
Nov. 30—	Voucher Check No. 54..... J. F. Blackerby, Louisville To November services rendered Committee on Pub- lic Policy .....		30.00
Nov. 30—	Voucher Check No. 55..... Elva Grant, Louisville To November salary, Bookkeeper.....	30.00	65.00
		65.00	



Nov. 30	Voucher Check No. 56.....	50.00	50.00
	Elizabeth Conkling, Louisville		
	To November salary, Stenographer for Medico-Legal Committee .....	50.00	14.98
Nov. 30	Voucher Check No. 57.....	14.98	50.00
	Louisville Postmaster, Louisville		
	To October postage.....	50.00	2.21
Nov. 30	Voucher Check No. 58.....	2.21	1.50
	Judge Rex Logan, P. M., Bowling Green		
	To Journal postage.....	2.21	1.50
Nov. 30	Voucher Check No. 59.....	1.50	4.65
	State Department of Health, Louisville		
	To reimbursement for express for Journal.....	4.65	32.10
Nov. 30	Voucher Check No. 60.....	32.10	2.10
	Bush-Krebs Co., Louisville		
	To 1 Multigraph Signature.....	2.10	180.12
Nov. 30	Voucher Check No. 61.....	180.12	578.00
	Universal Radio Supply Co., Louisville		
	To repairs to RCA Speaker.....	56.00	513.00
Nov. 30	Voucher Check No. 62.....	513.00	9.00
	State Department of Health, Louisville		
	To reimbursement for long distance calls.....	9.00	578.00
Nov. 30	Voucher Check No. 63.....	578.00	4,830.00
	Woman's Auxiliary Quarterly, Louisville		
	To 20% commission on 3 sales of book, "Medicine and Its Development in Kentucky".....	3,998.87	831.13
Nov. 30	Voucher Check No. 64.....	831.13	4,830.00
	The Master Reporting Co., Inc., New York, N. Y.		
	To reporting Kentucky State Medical Association Meeting .....	4,830.00	135.00
Nov. 30	Voucher Check No. 65.....	135.00	90.00
	The Times-Journal Publishing Co., Bowling Green		
	To 8 pages not charged on November Issue (124 page Journal instead of 116 as charged).....	90.00	30.00
	To 2375 December Issue—72 pages.....	30.00	65.00
	To Index aud 6 pt.....	65.00	50.00
Nov. 30	Voucher Check No. 66.....	50.00	33.60
	A. T. McCormack, Louisville		
	To reimbursement for rent on building located at 620 S. Third, Louisville		
	Payment on principal of note due 9-1-41.....	33.60	1.69
	Interest on balance of 6 notes amounting to \$84,047.01 .....	1.69	21.90
Dec. 21	Voucher Check No. 67.....	21.90	15.75
	A. T. McCormack, Louisville		
	To December salary, Secretary.....	15.75	450.00
Dec. 21	Voucher Check No. 68.....	450.00	2,500.00
	L. H. South, Louisville		
	To December salary, Business Manager.....	2,500.00	2,019.71
Dec. 21	Voucher Check No. 69.....	2,019.71	480.29
	J. F. Blackerby, Louisville		
	To December services rendered Committee on Public Policy .....	480.29	2,500.00
Dec. 21	Voucher Check No. 70.....	2,500.00	135.00
	Elva Grant, Louisville		
	To December salary, Bookkeeper.....	135.00	90.00
Dec. 21	Voucher Check No. 71.....	90.00	30.00
	Elizabeth Conkling, Louisville		
	To December salary, Stenographer for Medico-Legal Committee .....	30.00	65.00
Dec. 21	Voucher Check No. 72.....	65.00	50.00
	Louisville Postmaster, Louisville		
	To November postage.....	50.00	33.60
Dec. 21	Voucher Check No. 73.....	33.60	1.69
	State Department of Health, Louisville		
	To reimbursement for express for the Journal.....	1.69	21.90
Dec. 21	Voucher Check No. 74.....	21.90	15.75
	State Department of Health, Louisville		
	To reimbursement for long distance calls, as follows:		
	Journal: Association.....	15.75	450.00
Dec. 21	Voucher Check No. 75.....	450.00	2,500.00
	Curtis & Curtis, Attorneys, Louisville		
	To reimbursement for court costs in case Charles Steinmetz, etc., vs. Dr. Heman Humphrey:.....	2,500.00	2,019.71
Dec. 21	Voucher Check No. 76.....	2,019.71	480.29
	The Times-Journal Publishing Co., Bowling Green		
	To account of January Journal.....	480.29	2,500.00
Dec. 30	Voucher Check No. 77.....	2,500.00	135.00
	A. T. McCormack, Louisville		
	To reimbursement for rent on building located at 630 S. Third, Louisville		
	Payment on principal of note due 9-1-41.....	135.00	90.00
	Interest on balance of 6 notes amounting to \$80,048.14 .....	90.00	30.00
1941	Voucher Check No. 78.....	30.00	65.00
Jan. 31	Voucher Check No. 79.....	65.00	135.00
	L. H. South, Louisville		
	To January salary, Business Manager.....	135.00	90.00
Jan. 31	Voucher Check No. 80.....	90.00	30.00
	J. F. Blackerby, Louisville		
	To January services rendered Committee on Public Policy .....	30.00	65.00
Jan. 31	Voucher Check No. 81.....	65.00	
	Elva Grant, Louisville		

	To January salary, Bookkeeper.....	65.00	
Jan. 31	Voucher Check No. 82..... Elizabeth Conkling, Louisville		50.00
	To January salary, Stenographer for Medico-Legal Committee.....	50.00	
Jan. 31	Voucher Check No. 83..... Curtis & Curtis, Attorneys, Louisville		150.00
	To services rendered, 7-1-12-31-40 inclusive.....	150.00	
Jan. 31	Voucher Check No. 84..... Mayme Sullivan, Louisville		3.45
	To reimbursement for telegrams.....	3.45	
Jan. 31	Voucher Check No. 85..... Louisville Postmaster, Louisville		28.83
	To December postage.....	28.83	
Jan. 31	Voucher Check No. 86..... State Department of Health, Louisville		10.40
	To reimbursement for long distance telephone calls.....	10.40	
Jan. 31	Voucher Check No. 87..... State Department of Health, Louisville		1.67
	To reimbursement for express for Journal.....	1.67	
Jan. 31	Voucher Check No. 88..... Koehler Stamp & Stationery Co., Louisville		1.00
	To 2 stamps, Past-President and Councilor.....	1.00	
Jan. 31	Voucher Check No. 89..... Schuman's, New York, N. Y.		15.00
	To Valentine Biography of McDowell, First Edi- tion, N. Y., 1897 (McDowell Fund Expense).....	15.00	
Jan. 31	Voucher Check No. 90..... Bush-Krebs Co., Louisville		3.98
	To 1 Halftone X-Ray Picture.....	3.98	
Jan. 31	Voucher Check No. 91..... The Times-Journal Publishing Co., Bowling Green		553.00
	To 2375 January Issue—72 pages.....	513.00	
	6 pt. Tables & References.....	4.00	
		<u>517.00</u>	
	Less Credit by Check No. 76 dated 12-21-40.....	450.00	
	Balance due.....	67.00	
	To 2375 February Issues—68 pages.....	482.00	
	To 6 pt. References.....	2.00	
	To Extra Postage.....	2.00	
		<u>486.00</u>	
		553.00	
Feb. 28	Voucher Check No. 92..... A. T. McCormack, Louisville		5,000.00
	To reimbursement for rent on building located at 620 S. Third, Louisville.....		
	Payment to apply on balance of principal note No. 4 due 9-1-41.....	3,028.43	
	Payment to apply on balance of principal note No. 5 due 9-1-42.....	1,650.79	
		<u>4,679.22</u>	
	Interest on balance of \$78,028.43 through 2-28-41.....	320.78	
		<u>5,000.00</u>	
Feb. 28	Voucher Check No. 93..... A. T. McCormack, Louisville		135.00
	To February salary, Secretary.....	135.00	
Feb. 28	Voucher Check No. 94..... L. H. South, Louisville		90.00
	To February salary, Business Manager.....	90.00	
Feb. 28	Voucher Check No. 95..... J. F. Blackerby, Louisville		30.00
	To February services rendered Committee on Public Policy.....	30.00	
Feb. 28	Voucher Check No. 96..... Elva Grant, Louisville		65.00
	To February salary, Bookkeeper.....	65.00	
Feb. 28	Voucher Check No. 97..... Elizabeth Conkling, Louisville		50.00
	To February salary, Stenographer for Medico-Legal Committee.....	50.00	
Feb. 28	Voucher Check No. 98..... Louisville Postmaster, Louisville		8.21
	To January postage.....	8.21	
Feb. 28	Voucher Check No. 99..... Judge Rex Logan, P. M., Bowling Green		50.00
	To postage for Journal.....	50.00	
Feb. 28	Voucher Check No. 100..... State Department of Health, Louisville		11.90
	To reimbursement for long distance calls, Journal and Association.....	11.90	
Feb. 28	Voucher Check No. 101..... State Department of Health, Louisville		1.56
	To reimbursement for express for Journal.....	1.56	
Feb. 28	Voucher Check No. 102..... The Macmillan Company, Chicago, Illinois		4.32
	To 2 Macmillan Modern Dictionary Indexed Edition.....	4.32	
Feb. 28	Voucher Check No. 103..... Bush-Krebs Co., Louisville		8.00
	To touching up copies and 2 ZE's charts.....	8.00	
Feb. 28	Voucher Check No. 104..... The Times-Journal Publishing Co., Bowling Green		456.00
	To 2400 March Issue—64 pages.....	456.00	
Mar. 31	Voucher Check No. 105..... A. T. McCormack, Louisville		2,500.00
	To reimbursement for rent on building located at 620 S. Third, Louisville.....		
	Payment to apply on principal note due 9-1-42.....	2,011.01	
	Interest on balance of \$73,349.21 through 4-30-41.....	488.99	
		<u>2,500.00</u>	



Mar. 31—	Voucher Check No. 106.....		135.00
	A. T. McCormack, Louisville		
	To March salary, Secretary.....	135.00	
Mar. 31—	Voucher Check No. 107.....		90.00
	L. H. South, Louisville		
	To March salary, Business Manager.....	90.00	
Mar. 31—	Voucher Check No. 108.....		30.00
	J. F. Blackerby, Louisville		
	To March services rendered Committee on Public Policy.....	30.00	
Mar. 31—	Voucher Check No. 109.....		65.00
	Elva Grant, Louisville		
	To March salary, Bookkeeper.....	65.00	
Mar. 31—	Voucher Check No. 110.....		50.00
	Elizabeth Conkling, Louisville		
	To March salary, Stenographer for Medico-Legal Committee.....	50.00	
Mar. 31—	Voucher Check No. 111.....		8.53
	Louisville Postmaster, Louisville		
	To February postage.....	8.53	
Mar. 31—	Voucher Check No. 112.....		8.35
	State Department of Health, Louisville		
	To reimbursement for long distance calls, as follows:		
	Journal and Association.....	8.35	
Mar. 31—	Voucher Check No. 113.....		2.11
	State Department of Health, Louisville		
	To reimbursement for express for Journal.....	2.11	
Mar. 31—	Voucher Check No. 114.....		50.00
	Layman & Layman, Attorneys, Elizabethtown		
	To professional services in case John Guess, Administrator of the estate of Ruby Drake, deceased vs. Mrs. Maggie Layman, Executrix of the estate of Dr. R. T. Layman, deceased.....	50.00	
Mar. 31—	Voucher Check No. 115.....		426.00
	The Times-Journal Publishing Co., Bowling Green		
	To 2400 April Issue—60 pages.....	445.00	
	To 6 pt References.....	5.00	
	Less 4 pages charged on March Issue (60 pages instead of 64 as charged).....	24.00	
		<u>426.00</u>	
Apr. 30—	Voucher Check No. 116.....		135.00
	A. T. McCormack, Louisville		
	To April salary, Secretary.....	135.00	
Apr. 30—	Voucher Check No. 117.....		90.00
	L. H. South, Louisville		
	To April salary, Business Manager.....	90.00	
Apr. 30—	Voucher Check No. 118.....		30.00
	J. F. Blackerby, Louisville		
	To April services rendered Committee on Public Policy.....	30.00	
Apr. 30—	Voucher Check No. 119.....		65.00
	Elva Grant, Louisville		
	To April salary, Bookkeeper.....	65.00	
Apr. 30—	Voucher Check No. 120.....		50.00
	Elizabeth Conkling, Louisville		
	To April salary, Stenographer for Medico-Legal Committee.....	50.00	
Apr. 30—	Voucher Check No. 121.....		25.00
	Mrs. J. F. MacWhorter, Springfield		
	To clerical services in connection with Medical Preparedness and its relation to Defense Program.....	25.00	
Apr. 30—	Voucher Check No. 122.....		44.29
	Louisville Postmaster, Louisville		
	To March postage.....	44.29	
Apr. 30—	Voucher Check No. 123.....		6.60
	State Department of Health, Louisville		
	To reimbursement for long distance calls, Association and Journal.....	6.60	
Apr. 30—	Voucher Check No. 124.....		1.45
	State Department of Health, Louisville		
	To reimbursement for express for Journal.....	1.45	
Apr. 30—	Voucher Check No. 124A.....		12.50
	American Surety Company of New York, N. Y.		
	To premium on Policy No. 433265 K for Amplias W. Davis, M. D., Treasurer, Kentucky State Medical Association.....	12.50	
Apr. 30—	Voucher Check No. 125.....		150.00
	Premier Paper Company, Louisville		
	To 30,325—16 cartons 8 3-4x11 1-4—24 lb Manila Catalog Envelopes, O. E. Ungummed Flaps., at \$4.95.....	150.00	
Apr. 30—	Voucher Check No. 126.....		490.00
	The Times-Journal Publishing Co., Bowling Green		
	To 2300 May Issue—68 pages.....	475.00	
	To 6 pt. References.....	15.00	
		<u>490.00</u>	
May 31—	Voucher Check No. 127.....		135.00
	A. T. McCormack, Louisville		
	To May salary, Secretary.....	135.00	
May 31—	Voucher Check No. 128.....		90.00
	L. H. South, Louisville		
	To May salary, Business Manager.....	90.00	
May 31—	Voucher Check No. 129.....		30.00
	J. F. Blackerby, Louisville		
	To May services rendered Committee on Public		

	Policy .....	30.00	65.00
May 31—	Voucher Check No. 130..... Elva Grant, Louisville To May salary, Bookkeeper.....	65.00	50.00
May 31—	Voucher Check No. 131..... Elizabeth Conkling, Louisville To May salary, Stenographer for Medico-Legal Committee .....	50.00	50.00
May 31—	Voucher Check No. 132..... Judge Rex Logan, P. M., Bowling Green To Journal postage.....	50.00	27.61
May 31—	Voucher Check No. 133..... Louisville Postmaster, Louisville To April postage.....	27.61	5.00
May 31—	Voucher Check No. 134..... A. O. Miller, Secretary, Allen County Medical So- ciety, Scottsville To refund for Dr. C. W. Holland's 1941 dues.....	5.00	10.70
May 31—	Voucher Check No. 135..... John L. Gruber, Louisville To court costs in case Charles Steinmetz, etc. vs. Dr. Heman Humphrey.....	10.70	9.00
May 31—	Voucher Check No. 136..... Electric Blue Print & Supply Co., Louisville To 200 Blue Prints of Floor Plan for 1941 Louis- ville Meeting.....	9.00	25.00
May 31—	Voucher Check No. 137..... Metcalf Florist, Hopkinsville To design for Dr. Austin Bell, President.....	25.00	7.22
May 31—	Voucher Check No. 138..... Meffert Equipment Co., Louisville To 2 No. 2546 Green Steel Card Cases.....	7.22	2.95
May 31—	Voucher Check No. 139..... Koehler Stamp & Stationery Co., Louisville To 1 Signature Stamp, "W. E. Gary, M. D.," President .....	2.95	11.70
May 31—	Voucher Check No. 140..... State Department of Health, Louisville To reimbursement for long distance calls, Association and Journal.....	11.70	1.57
May 31—	Voucher Check No. 141..... State Department of Health, Louisville To reimbursement for express for Journal.....	1.57	1.05
May 31—	Voucher Check No. 142..... State Department of Health, Louisville To reimbursement for telegrams for Journal and Association .....	1.05	468.50
May 31—	Voucher Check No. 143..... The Times-Journal Publishing Co., Bowling Green To 2300 June Issue—60 pages..... To 6 pt. References and Tables..... To 4 pages not charged in May Issue (72 instead of 68, as charged).....	420.00 10.00 26.00	456.00
	To 200 Technical Exhibit Space Forms..... To 200 Application for Space Forms.....	5.50 7.00	12.50
		468.50	242.23
June 30—	Voucher Check No. 144..... A. T. McCormack, Louisville To June salary, Secretary..... To expenses of trip to Cleveland to attend A. M. A. Meeting .....	135.00 107.23	242.23
June 30—	Voucher Check No. 145..... L. H. South, Louisville To June salary, Business Manager.....	90.00	90.00
June 30—	Voucher Check No. 146..... J. F. Blackerby, Louisville To June services rendered Committee on Public Policy .....	30.00	65.00
June 30—	Voucher Check No. 147..... Elva Grant, Louisville To June salary, Bookkeeper.....	65.00	50.00
June 30—	Voucher Check No. 148..... Elizabeth Conkling, Louisville To June salary, Stenographer for Medico-Legal Committee .....	50.00	17.56
June 30—	Voucher Check No. 149..... Louisville Postmaster, Louisville To May postage.....	17.56	2.50
June 30—	Voucher Check No. 150..... The Standard Printing Co., Louisville To binding 1 volume, Kentucky Medical Journal, Volume 38, 1940.....	2.50	1.20
June 30—	Voucher Check No. 151..... State Department of Health, Louisville To reimbursement for long distance calls for Journal.....	1.20	3.67
June 30—	Voucher Check No. 152..... Bush-Krebs Co., Louisville To 1 Zinc Etching of Diagram..... Less 2% .....	3.74 .07 3.67	2.03
June 30—	Voucher Check No. 153..... State Department of Health, Louisville To reimbursement for express, Association and Journal .....	2.03	



June 30—Voucher Check No. 154.....		427.00
The Times-Journal Publishing Co., Bowling Green		
To 2,300 July Issue—60 pages.....	420.00	
To 6 pt. and Tables.....	5.00	
To Postage Due.....	2.00	
	<hr/>	
	427.00	
June 30—Voucher Check No. 155.....		5,000.00
A. T. McCormack, Louisville		
To reimbursement for rent on building located at		
620 S. Third St., Louisville:		
Payment to apply on principal note due 9-1-42.....	4,286.62	
Interest on balance of \$71,338.20 thru 7-31-41.....	713.38	
	<hr/>	
	5,000.00	
June 30—Voucher Check No. 156.....		1.00
Hon. George Glenn Hatcher, Secretary of State,		
Frankfort.		
To filing fee for annual verification report of State-		
ment of Corporation of Kentucky State Medical		
Association.....	1.00	
July 31—Voucher Check No. 157.....		135.00
A. T. McCormack, Louisville		
To July salary, Secretary.....	135.00	
July 31—Voucher Check No. 158.....		90.00
L. H. South, Louisville		
To July salary, Business Manager.....	90.00	
July 31—Voucher Check No. 159.....		30.00
J. F. Blackerby, Louisville		
To July services rendered Committee on Public		
Policy.....	30.00	
July 31—Voucher Check No. 160.....		65.00
Elva Grant, Louisville		
To July salary, Bookkeeper.....	65.00	
July 31—Voucher Check No. 161.....		50.00
Elizabeth Conkling, Louisville		
To July salary, Stenographer for Medico-Legal		
Committee.....	50.00	
July 31—Voucher Check No. 162.....		150.00
Curtis & Curtis, Attorneys, Louisville		
To services rendered, 1-1-6-30-41, inclusive.....	150.00	
July 31—Voucher Check No. 163.....		2.11
Mayme Sullivan, Louisville		
To reimbursement for Association telegrams.....		
telegrams.....	2.11	
July 31—Voucher Check No. 164.....		14.30
Louisville Postmaster, Louisville		
To June postage.....	14.30	
July 31—Voucher Check No. 165.....		6.66
Bush-Krebs Co., Louisville		
To 1 Sq. HT Portrait of Man and ZE of Signature.....	6.66	
July 31—Voucher Check No. 166.....		4.54
State Department of Health, Louisville		
To reimbursement for express.....	4.54	
July 31—Voucher Check No. 167.....		18.85
Woman's Auxiliary, Kentucky State Medical Asso-		
ciation, Louisville		
To 25% Commission on Advertisement amounting		
to \$96.18.....	24.04	
Less Cost of 1 M Journal Envelopes delivered, 7-5-40.....	5.19	
	<hr/>	
	18.85	
July 31—Voucher Check No. 168.....		446.00
The Times-Journal Publishing Co., Bowling Green		
To 2,300 August Issue—64 pages.....	446.00	
Aug. 30—Voucher Check No. 169.....		135.00
A. T. McCormack, Louisville		
To August salary, Secretary.....	135.00	
Aug. 30—Voucher Check No. 170.....		90.00
L. H. South, Louisville		
To August salary, Business Manager.....	90.00	
Aug. 30—Voucher Check No. 171.....		30.00
J. F. Blackerby, Louisville		
To August services rendered Committee on Public		
Policy.....	30.00	
Aug. 30—Voucher Check No. 172.....		65.00
Elva Grant, Louisville		
To August salary, Bookkeeper.....	65.00	
Aug. 30—Voucher Check No. 173.....		50.00
Elizabeth Conkling, Louisville		
To August salary, Stenographer for Medico-Legal		
Committee.....	50.00	
Aug. 30—Voucher Check No. 174.....		50.00
Judge Rex Logan, P. M., Bowling Green		
To postage for Journal.....	50.00	
Aug. 30—Voucher Check No. 175.....		1.40
Woman's Auxiliary Quarterly, Kentucky State		
Medical Association, Louisville		
To 20% Commission on 2 Sales of Book, "Medi-		
cine and Its Development in Kentucky,"		
amounting to \$7.00 (Book Fund).....	1.40	
Aug. 30—Voucher Check No. 176.....		600.00
The Times-Journal Publishing Co., Bowling Green		
To account of September Issue.....	600.00	
	<hr/>	
		336,646.16

TOTAL.....

A. W. DAVIS, Treasurer

## THE A. M. A. MEETING AT CLEVELAND

JUNE 2-6, 1941

MISCH CASPER, M. D.

Louisville

The 92nd annual meeting of the A. M. A. passed off according to schedule at Cleveland, Ohio. The Kentucky delegation naturally was exultant to have the second Kentucky surgeon elected president within three years. This being the 32nd meeting we have attended, we think we are entitled to the opinion that the scientific exhibits were the best ever held. The technical exhibit was also original, well and properly presented, and was visited by thousands. The technical exhibits have changed, have undergone a kind of evolution for the better. Most of them now are not manned by the supersalesmen of old, but rather by research men who are willing to work with physicians for the progress of the medical profession.

The papers of the various sections were snappy and to the point, were well presented and well received by large and interested audiences. As those papers will be published in the Journal, our notes will deal nearly altogether with the scientific exhibits. The latter were far too numerous (176 booths) to mention all of them; so some will be omitted, not from lack of quality or deserts but from lack of space. There were five motion picture rooms going from 8:30 to 6:00 daily, and the best pictures ever presented were shown, many of them in color.

## SCIENTIFIC EXHIBITS

**MOULAGES OF CANCER OF THE COLON AND VARIOUS METHODS OF HANDLING:** The moulages, a sort of combination rubber and wax in natural color, were arranged with light in a semi-transparent abdomen, to show the results of operation and the functioning of intestinal tract after final operation. Multiple and recurring carcinomata in different areas of the colon, following years after the original carcinoma, are not all metastases, but some of them under the microscope reveal a different type of cell and tumor. Also, there may be present at the same time different types of carcinoma in the same individual.

Gastroscope with lights in situ, showing various lesions in the stomach, was an interesting exhibit. The pathology was shown in natural appearance; also, corresponding Roentgenograms and drawings of the pathology were alongside the photographs. Especially shown were ulcer, ulcerating car-

cinoma, infiltrating and polypoid carcinoma, also operation of resection and final anastomosis. Moulages of many lesions removed were shown. In the diagnosis attention was called to the fact that male victims greatly outnumber female, and age varies from 18 to 79 inclusive. In listing the first symptoms experienced, dyspepsia ranked highest with 52%; ulcer symptoms 28%; vague abdominal distress 11%; general decline 8%; hemorrhage only 1%. Also, it was stressed that the vagueness of first symptoms is a cause of late diagnosis. As a rule, there is a period of more than one year between the first symptoms and operation. 25% are operable when seen by the surgeon. 24% of resectable growths survive five years. On account of delay only 6% of total cases examined survive five years. There were other exhibits of cancer of the stomach, its diagnosis and treatment.

Benign growths and cancer of the lung, with bronchoscopic pictures, X-ray pictures, and microscopic pathology of lesions accompanying bronchoscopic pictures, made a very interesting exhibit. Bronchogenic tumors with drawings showing site of lesion and accompanying history of many cases were shown. Certainly, surgery of the chest has made great strides in the past ten years, and the bronchoscope has been the great factor in this progress.

Cancer of the genito-urinary tract was well presented in six booths. In cancer of the colon most operators like two stage operations: colostomy, then resection of colon in the second stage. This is especially true if the growth is in the left side of the colon, much depending upon the condition of the patient and the amount of involvement of the colon.

**GALL BLADDER VISUALIZATION BY MEANS OF THE PERITONEOSCOPE:** With this instrument a needle is guided by direct vision through the peritoneoscope. The needle is plunged into the gall bladder, bile removed, and opaque dye injected immediately. All is done through a trocar and with local anesthesia. This new accomplishment with the peritoneoscope will hardly supersede other methods of diagnosis, though the author claims that the peritoneoscope is indicated in all cases of ascites or hemorrhage in the abdomen (trauma or ectopic). Also, it is valuable in diagnosing cancer of abdominal organs. Use of the peritoneoscope is definitely contra-indicated in acute abdomen, extensive postoperative adhesions, and cases with cardiac decompensation.



An interesting booth showed how to prevent leakage of intestinal anastomosis by exteriorization, which simply leaves the anastomosed junction of the bowel outside the abdomen for ten days. As leakage is one of the chief causes of failure and mortality via the peritonitis route in intestinal anastomosis, this method has prospects of success. The talking moving picture showing the operation and steps was very interesting. We inspected this exhibit with Doctor W. Wayne Babcock, who devised a glass chimney for visualization of anastomosis some years back. Doctor Babcock thought that exteriorization this way would be a step forward with the same end in view.

**EFFECT OF BOWEL DISTENTION ON PLASMA VOLUME:** There were experiments to show great fluid losses, which the distention causes by squeezing fluids out of the intestinal wall blood vessels and lymph channels. (In a paper on the floor, it was shown how the mortality of obstruction has been very greatly reduced by the Miller-Abbott tube, largely by preventing or relieving this distention.)

**HEPARIN, ITS ADMINISTRATION AND RESULTS:** Heparin has been made more practical since the discovery in 1941 of the availability of heparin taken from the lung of the ox. It now can be gotten for \$2.50 a vial, which constitutes one shot. The drug has become essential in the operation of splicing arteries and anastomosis of blood vessels, and is also valuable in cases of thrombus. (See June A. M. A. Journal for a splendid article on Heparin, written from Sweden.)

A booth of injuries of face and jaw showed very many different types of injuries, and also called attention to the fact that such injuries are much more common and are likely to become numerically much greater with further extension of the war. The final results as shown by photographs were excellent. Surgeons will have to become plastic-surgery-minded in caring for such injuries.

**CANCER OF THE THYROID:** In diagnosis it is difficult to differentiate from adenoma. The exhibits showed that 3% of nodular adenomas are cancerous, and that when the diagnosis is clear the cancer is usually too far advanced for operation. They also stressed the necessity of removing all adenomas early. Benign lesions closely simulate cancer of the thyroid. The operation often includes resection of most of the cervical veins, as metastases are usually through the blood stream.

**SYMPATHECTOMY IN THE TREATMENT OF OBLITERATING, PROLIFERATIVE ARTERIAL DISEASE, AN OSCILLOMETRIC STUDY:** An oscilometer is getting to be as important a part of the doctor's armamentarium as a sphygmomanometer. Patients with coldness of the feet or any other symptoms of disturbed circulation of the feet, and all diabetics, need this study. A rapid rise in the surface temperature will follow vasodilatation. Permanent abnormal changes or absence of circulation cause atrophy of the skin and tissues of the foot. The oscilometer may reveal these changes before unfortunate pathology results.

**CLINICAL AND EXPERIMENTAL STUDIES ON SEGMENTAL PAIN AND TENDERNESS:** Treatment was by nerve block with ammonium chloride solution,  $\frac{3}{4}\%$ , 400 mg. being used. This solution is used similarly to novocaine but lasts longer. For pain on the outer side of the foot, inject the first and second foramina. A diagram showed how to find these foramina, the second one being 1 cm. in and 1 cm. down from the posterior spine of ilium. The advantage of using ammonium muriate is that the pain is abolished without loss of motor or other sensory function. The exhibitor emphasized that it is valuable only in pain with tenderness, and is not good in visceral pain. Different segments of the cord are injected according to the location of pain. He states that he has gone as high as the fifth dorsal vertebra. For higher structures he uses nerve block, like blocking the brachial plexus. The exhibit contained an ingenious rubber manikin for locating sympathetic neurons, also spinal nerves. When one part of the manikin was touched with one electric terminal, the other pole, being over the nerve center, would cause that corresponding part of the anatomy to light.

An exhibit on varicose veins and their complications showed causes both positive and negative. The valves may be absent, destroyed by trauma or inflammation, and the pressure of the blood column from auricle down being unsupported, pressure is thus directly exerted on the veins of the lower extremity. This pressure is increased by coughing, straining, pregnancy, labor, ascites, and so on. Some of the complications are skin changes, ulcers, periphlebitis. The exhibitor advocates tying the internal saphenous vein, which is always a major hospital procedure. Then he follows this by injection of the tributaries of the saphenous vein. (This has been our usual practice in recent years.)

Primitive medicine comprised a unique

exhibit, showing the paraphernalia of the primitive medicine man of Indian days. The exhibit was made more colorful by an Indian dressed in his native garb, who demonstrated the complicated and diverse technique of the Indian system of treatment. The essence of most of their treatment was driving out of evil spirits. Their armamentarium included more instruments of treatment than the modern doctor carries nowadays.

Another very interesting historical exhibit was on the origin and development of the microscope, many of the earliest forms being shown. The evolution of the splendid modern instrument through progressive improvement of the original made an interesting exhibit.

Continuous spinal anesthesia is coming into more general use; and, as we have used spinal anesthesia ever since its inception, we were naturally very much interested in its exhibit. One of the special requirements in administering spinal anesthesia is a special pad for the operating table with a recess in the pad for protecting the needle. The needle must be very flexible. Squibb now has an ampule containing 500 mg. which is to be dissolved in 10 cc. of spinal fluid (1 cc. equals 50 mg.) The amount injected into the spinal canal is governed almost entirely by sensation. The operation is usually started after giving 2cc. For long and complicated operations this form of anesthetic constitutes an important advance, and commends itself.

There were several booths on fractures. These have been running for the last few meetings of the A. M. A., and always carry practical demonstrations all the way from the making of plaster Paris bandages to demonstrated and practical methods of applications for various fractures of limbs, spine, and so on. Also, the various methods of setting the fragments of different fractures were given by specialists during the entire day. Many signs of what to do and what not to do in fractures were posted on the wall. One that is especially apropos in these days of frequent mal practice suits was: "X-ray may be used before reduction, but must be used after reduction." These many booths on fractures constituted a great refresher course for any one doing fracture work.

The next booth has been shown before, but the showing was somewhat improved over former ones. It had photographs in color of every known pathology of the cervix uteri. Also, the instrument and methods

of taking pictures of the cervix were demonstrated. All the photographs were small when taken, but many enlarged ones in color were shown. They were taken by a telescopic tube with various prisms and magnifying glasses, which were attached to a small Leica camera. To the gynecologist who is interested in preserving photographs and important cervical pathology this mechanism will prove a boon.

Lyophil bovine serum and plasma is a new venture, and study on its use as a blood substitute gives promise, though there is a reaction in about 20% of persons. It cross matches with human serum without hemolysis. The indications for its use will be the same as for the human serum or plasma. Besides its being cheaper and always at hand, another advantage it has is that there is no danger of polycythemia as in too frequently repeated transfusions. The bovine serum readily supplies nitrogenous elements and will have a practical use in most hospitals.

**FATTY LIVER FROM PANCREATIC DEFICIENCY:** Experiments on depancreatized dogs show the liver may be protected by action of pancreatic juice. When the pancreas of a dog is tied off, the result leads to development of fatty degeneration of the liver and then death. Conclusion of the experiment showed that the non-insulin lipid controlling factor of the pancreas is contained in the external secretion of the pancreas.

An exhibit showed the pathology of arthritis, which can be produced in animals by injecting streptococcic virus of pleuropneumonia and other agents. The pathology produced is similar to arthritis in man, as is also acquired equine arthritis. The characteristic changes are: exudation and pannus formation, degeneration of articular cartilage with erosions, proliferation of synovial membrane, exudates becoming organized into fibrous tissue first, then osseous, and finally leading to ankylosis. The exhibitor listed the causes of various types of pathology under three heads: metabolic, allergic, and infectious, dividing the last into specific and non-specific. Under specific infections he grouped Neisserian, tubercular, syphilitic. In the treatment of arthritis a new salt of gold was shown in the exhibit, it being gold calcium thiomalate. This is quite an improvement on the gold sodium thiomalate, which showed some value formerly, but which is toxic and cumulative. Attention was called to the fact that in the treatment of typical cases patients excrete only 9% of the gold that they have



taken, and that the gold can be found in the urine 60 to 100 days after administration of the sodium salt. Just where this gold is stored in the body is a question to be answered. Also, some persons are especially sensitive to gold, some reacting to a small amount, and others tolerating huge amounts. The exhibitor reported that 33% of his obstinate cases showed improvement after the use of this new gold salt. (After all, we may find a use for the great store of gold at Fort Knox!)

**THIOCYANATES AND HYPERTENSION:** The exhibitor advocated control of the thiocyanate therapy. It relieved symptoms and reduced the blood pressure in 50% of patients with hypertension. Reduction is effected only by adequate and sustained blood concentration of the thiocyanates. Improvement requires two to four weeks' time. Three months of persistent therapy are advocated. The treatment must be very much individualized, depending upon the symptoms, blood pressure response, and the blood concentration of the thiocyanates, which he thinks should be from eight to twelve mg. %. Dosage in any one individual is gauged according to renal clearance. Circulatory efficiency and seasonal variation must be taken into consideration. He stressed the point that daily blood thiocyanate determination is the only safeguard to control this powerful drug, and that toxic manifestations are sudden, severe, and rapidly fatal.

Another exhibitor gave us hope of a cure for high blood pressure with a kidney extract. This new extract works even when both kidneys are diseased. The pure form of the extract has not yet been isolated, but enough work has been done to offer promise of soon isolating this new hormone, which it probably is. The same exhibitor has been producing high blood pressure in animals at will by clamping the renal arteries, and then relieving it by removing the clamp. The blood pressure, elevated as long as seven months with a clamp, dropped abruptly to normal when the clamp was removed. It has been known for some time that removal of a kidney with a blocked artery often cures high blood pressure.

**USE OF SULFANILAMIDE IN THE PERITONEUM, EXPERIMENTAL AND CLINICAL:** This study was well received, and a paper was read on it in the surgical section. It was noted that sometimes this treatment causes jaundice. The essayist advocated use of as high as 12 grams. The paper was extensiv-

ely discussed. In our discussion we gave our experience, which is that it is a very practical method. We used it in one case in which the stomach was perforated three times by a knife stab, the patient not coming to the hospital for 24 hours, and then with well developed peritonitis. The peritonitis was checked right where it was, and the patient recovered. Another case we reported, perhaps the only one in which sulfathiazole was ever used thus, was in a cesarean section that had been handled a good deal, examined by five different physicians, and potentially infected. We put the drug in the uterus, outside and in the abdominal wall. The patient recovered without any untoward results. We also reported that our appendicitis mortality had been greatly reduced since use of this method in cases with rupture, accompanying abscesses, or peritonitis. We always use sulfathiazole, using 7 gms. in the abdomen and 2 gms. in the wall. In some cases we drain and in others we do not. We think sulfathiazole is one of the greatest discoveries of all time, and certainly one of the ten greatest drugs that we have. Sulfathiazole has a power of good, but beware, as it has power for evil, too, though we have had no cases followed by jaundice. Slides were shown of the peritoneum taken postmortem and also from experimental rabbits, which showed that the peritoneum is not irritated by sulfanilamide. The drug is absorbed from the peritoneum by the blood and reaches its highest concentration in 7 to 15 hours. One exhibitor reported 90 cases without a death in acute appendicitis complicated with abscess or peritonitis, and a later series of 268 cases without a death. He also uses it locally as a prophylactic in acute salpingitis, gunshot wounds, and any abdominal surgery with infected peritoneum.

There were, as there should be, many exhibits on the sulfonamide drugs. A simple test was given for laboratory estimates of blood and urine concentration. The new sulfaguanidine has not given sufficient evidence for acceptance by the Council of the A. M. A. yet, but we know enough now to feel that very probably it will prove valuable for dysentery and other intestinal infections.

Another great asset in modern surgery is the Miller-Abbott tube. We have written before about this, but it is proving so regularly valuable and life-saving that it bears repetition. One reporter cited 726 cases with a mortality of 12%, a considerable lowering of his former mortality in 1000

cases. Others reported a similar improvement in mortality with our new methods of handling acute abdomens. One man stated that the Miller-Abbott tube with Wangenstein suction constitutes the greatest advance in abdominal surgery in the past decade.

**VARIATION OF DRUG ACTION ON DIFFERENT ORGANS OF DIFFERENT SPECIES, ALSO VARIATIONS IN DIFFERENT RACES:** The exhibit showed many animal experiments of drug action. These will require rechecking after extensive experiments. Pituitary extract raises blood pressure in most animals, but lowers it in chickens. Mustard gas burns the skin of Caucasians more readily than that of Orientals or Negroes. Ephedrine, cocaine, eucatropine, topically applied, dilate the pupils of Caucasians, but have very little effect on Negroes or Chinese. Thus, many drugs were enumerated that affect different animals, even as we have long known blondes and brunettes respond differently to drugs. This response is very greatly altered in different races. So the exhibit would constitute practical knowledge for doctors who expect to practice among Chinese or in darkest Africa.

The study of obstetrical analgesia brought out many points. It was determined first that morphine does not cause fatal narcosis, but does check labor. Barbiturates cause striking depression of fetal respiration, and if they are used in large doses, there may be trouble in starting fetal breathing. These experiments tend to revert to obstetrical analgesia of old, that is, regulated opiates prior to delivery.

One exhibit was on the chemical determination of blood concentration of alcohol in the intoxicated individual. This report covered experiments with 3000 determinations, giving the alcoholic effect on different lobes of the brain, many concentrations of blood alcohol being made. It showed that blood concentration of 0.2% to 0.25% causes intoxication in 92% to 97½% of persons, and that with a blood concentration of over 0.25%, 100% of persons are clinically intoxicated. The experiment concludes that the action of alcohol on the brain from first to last is like that of a narcotic; heretofore, it has been taught that in small doses alcohol acts as a stimulant.

**ULTRAVIOLET LIGHT ON ALBINO MICE CAUSING CANCER OF THE SKIN:** The exhibit included a map showing areas of the United States where the predominance of skin cancer of the face is most noticeable, thus indicating that too much sunlight is the

cause of cancer of the face. Negroes are seldom affected thus. Blondes are more susceptible than brunettes. These are early studies, and no absolute facts as yet are available. It was shown that on the plains of the West, farmers who are out in the sun a great deal have many cancers of the face, due not only to excessive sunlight, but perhaps also to the irritation of sand storms.

In cancer of the bladder, painless hematuria is the cardinal symptom, and hematuria is the initial symptom in 75% of cases. Dysuria, pain, and retention may accompany the hematuria. Since the bleeding is painless and often transitory, patients will probably ignore it, and, infrequently, the doctor also may ignore it. Thus, the growth is usually discovered too late for conservative surgery. The operation of cystectomy carries an average of 50% mortality. The exhibit showed a special X-ray tube in a lead cylinder devised for intravesicle radiation. The X-ray tube is air-cooled and sterilizable. The X-ray therapy is administered through a suprapubic wound; thus, the skin is spared X-ray burn, and the concentration of the X-ray is greatest at the site of growth.

Bone tumors had many exhibits with hundreds of films reduced to 6 x 4 inches in size for concentration of material. The walls of the booth on all sides were literally covered with wonderful X-ray films. Also, valuable lessons were given in the effect of X-ray treatment of giant cell tumors, with pictures in different stages shown. X-ray men are getting proficient now in differentiating the pathology of bone tumors by the Roentgenogram alone. This wealth of material was a splendid study in reading X-ray films, distinctly a step forward in radiology.

Our local City Hospital had an exhibit on treatment of fractures of the humerus with the hanging (Caldwell) cast. This is a new, simplified, and proven method. We can testify to the fact that this method is both comfortable and effective, as we have three casts working now. The theory is that the weight of the cast, which extends only a little above the elbow, produces the extension, and very early even the elbow is released for movement.

Goiter in the South was reviewed in an exhibit that covered a wide scope of country. It stressed newer forms of juvenile goiter and different degrees of exophthalmos. In certain sections of the South goiter is more endemic than in others. The goiter situation in the South is about like that of Kentucky.



An exhibit on Parathyroid Tumor may be summarized thus: 1. X-ray may not show any bone changes; 2. generalized osteoporosis; 3. osteitis fibrosa cystica. (This last may simulate: a. arthritis, b. neuritis, etc.); 4. endochondromata. The first patient operated on for parathyroid tumor was in 1925, and since then 300 cases have been reported. It is important to keep in mind, so as not to overlook this pathology, the following clinical signs and symptoms: 1. it is deep seated; 2. tumor-like swelling of hands and feet; 3. bowing of legs; 4. scoliosis; 5. decrease in height; 6. spontaneous fractures; 7. disturbance of gait; 8. muscular weakness; (asthenia); 9. hypotonicity of muscles; 10. renal colic; 11. polyuria; 12. polydipsia; 13. constipation; 14. gastric pain; 15. loss of weight; 16. anemia; 17. high calcium, low phosphorus, and high phosphatase; and others.

Naturally, appendicitis is always an interesting subject. One exhibit included a review of 17,787 appendix cases of Cleveland hospitals. There were no deaths on those cases operated on the first 24 hours. The high mortality of delay and laxatives was stressed. The series included cases from 16 hospitals from Cleveland, with many and varying techniques. Most cities will experience about the same data that this exhibit showed, and even in a very large series they run true to form.

Under acute cholecystitis, another very interesting subject, the pathology, prognosis, and treatment were all given. Mortality was higher in the -otomy cases than in the -ectomy (the former being naturally the worse cases). The exhibit stressed the fact that cholecystitis is never an emergency operation, but if done the first 48 hours, then the mortality is the lowest. The exhibitor advocated cyclopropane anesthesia, with local anesthesia only in very bad cases. (We like combination anesthesia, small spinal infiltration of the lower six intercostal nerves, local in the wall, supplemented by cyclopropane.)

The exhibit on burns gave a substitute for tannic acid and nitrate of silver. These two agents are now supplemented by sulfapyridine or sulfathiazole, giving 1½ grains per pound of weight every 24 hours. Also, the new local application is sprayed on, a triple dye called Dimixol (McNeil Laboratories, Philadelphia) in 2.5% solution. The advantage of the triple dye is that no pus forms under it as in tannic acid. Proper skin grafting is still an important role in the follow-up treatment of scars following deep burns, also, general treat-

ment and prevention of shock. Burns will always be an interesting subject, because 6000 die annually of burns in the U. S. A.

Another booth on the subject of burns advised the following procedure in severe burns with shock or a possibility of shock: 1. Local treatment should be aimed at aiding the shock treatment. Rapid tanning fulfills this requirement to the greatest extent; 2. General treatment should be directed against possible toxic liver death even while the shock is being treated. Glucose is the best means of accomplishing this result; 3. Shock treatment proper has four chief elements: supportive treatment, oxygen, possibly adrenal cortical extract, and replacement of lost plasma. The amount of plasma needed can be roughly calculated for an average-sized adult as being 100 cc. plasma for every point the hematocrit exceeds the normal of 45, as long as the plasma proteins are above 6.0 gm./100 cc. When the plasma proteins are below 6.0 gm./100 cc., an additional 25 per cent of the calculated amount of plasma should be added for every gram the protein level is below 6.0.

**THE TUBULO-ALVEOLAR INJECTION OF THE PROSTATE GLAND:** A new diagnostic method for prostatic diseases was shown, with a special catheter with two bulbs on it. These are distended after introduction. One bulb is behind the prostate in the bladder and the other in front of it, the bulb in front being much smaller than the posterior one. Thus, when these bulbs are distended, the prostatic secretion can be withdrawn by suction for bacterial study. Also the ducts of the prostate gland can be injected with opaque X-ray fluid (sodium iodide 10%, 20 to 30 cc. pressure 120 mm. of mercury.) Also, other agents, as antiseptics, can be introduced through this special catheter for treatment of prostatitis. This should be a great supplementary treatment to massage.

**PHOSPHATASES AND PROSTATIC CARCINOMA:** The exhibit showed the urinary phosphatase is an index of prostatic secretion. The greatest concentration of acid phosphatase, pH5, is in the prostate gland; whereas, the concentration of alkaline phosphatase, pH9, is in the bones. It was also shown that castration retards growth of cancer of the prostate.

**COMBUSTIBLE ANESTHETIC AGENTS:** The exhibit showed how the prevention of explosion of combustible anesthetic agents is obtained by the addition of helium to the anesthetic gas, a new, useful addition to our anesthetic agents, especially in this day when cautery and electric coagulation,

plus cutting currents, are more and more used in surgery. This combination will eliminate a great hazard to both patient and surgeon, as the most combustible anesthetics are often the ones indicated.

## RESULTS OF SOBISMINOL MASS ADMINISTERED ORALLY

JOHN R. PATE, M. A.

Louisville

The treatment of syphilis with Sobisminol Mass, given by mouth, has been reported as being effective by several investigators.<sup>1</sup> Its advantages and disadvantages have been discussed pro and con. Injections, for example, require frequent visits to the physician over a long period of time. Many patients, because of the inconvenience of visiting the clinic or because of pain associated with injections, discontinue their treatment prematurely or receive it irregularly or intermittently. A suitable oral bismuth preparation, on the other hand, may be taken regularly by the patient and the pain of injection avoided.

Oral therapy has been objected to because the absorption from the gastrointestinal tract is not complete or constant and the exact amount mobilized in the blood stream and body tissues is undeterminable. The same may be said, however, of intramuscular injections of bismuth because, with the exception of a few of the highly soluble preparations, most of the bismuth preparations leave some of the drug at the site of the injection and, therefore, one cannot be certain of the amount of drug utilized. In other words, this objection to oral bismuth applies also to intramuscular injections.

Forty eight patients were given Sobisminol Mass<sup>2</sup> orally over a period of time ranging from one week to five months. It was supplied in capsules containing 0.2 gm. sodium bismuthate, 0.4 gm. trisopropanolamine, 0.1 gm. propylene glycol and 0.1 gm. of ethyl alcohol. This represents, approximately, 150 mg. of elemental bismuth per capsule. For each patient two capsules, three times a day, were prescribed. This has been found by most investigators to be effective therapeutically and better tolerated than larger doses.<sup>1</sup>

The urine of all the patients who received the Sobisminol Mass was examined at frequent intervals for the bismuth content. The content of bismuth per single specimen examined ranged from 0.02 to 0.8 mg. bismuth percent. The colorimetric scale method was used and, while this is only approximately accurate, the results, as given above, were accepted as approximate. Hanzlick and associates have made careful studies of the ingestion and excretion of bismuth; our examination revealed only the presence or absence of bismuth.

**CLINICAL RESULTS OF SOBISMINOL:** The Patients treated were divided into the following groups: Seropositive Primary Syphilis (2 cases); Early and Secondary Syphilis (15 cases, all types reported); Early Latent Syphilis (4 cases; Late Latent Syphilis Without Any Complications (13 cases); Central Nervous System Syphilis (4 cases); Cardiovascular Syphilis (9 cases); Late Congenital Syphilis (1 case).

**SEROPOSITIVE PRIMARY SYPHILIS:** Two patients with primary syphilis were reported.

No. 1. The first in this group was admitted with a positive Kahn, a positive Darkfield and lesions on the vulva. She was given Sobisminol capsules; one week later the Darkfield examination was negative and the lesions had practically healed. There was no albumin in the urine after one week of consumption of Sobisminol Mass, but there were a few epithelial cells present and many pus cells. 42 days later the urine contained 0.2 mg. bismuth percent and 1 plus albumin, with increase in pus cells. However, 7 days later the albumin was negative and pus cells were still present in large numbers, and 28 days later the albumin was negative and pus cells had decreased. The patient, during this period of five months, had no reaction to the drug and felt much better than when she began taking this drug.

No. 2. The second patient in this group, admitted with a positive Darkfield, began treatment in the seronegative primary stage of the disease. He had had sufficient quantities of nearsphenamine intravenously and bismuth intramuscularly to prevent the blood from becoming positive and was put on Sobisminol for 21 days. Urine remained negative both for bismuth and albumin during this period and showed only a few pus cells upon examination.

**EARLY SECONDARY SYPHILIS:** No 3. The first patient in this group was admitted with a chancre of the cervix, a positive Kahn, a positive Darkfield and an early secondary rash which disappeared within

<sup>1</sup>The Fayette County Health Department and the State Department of Health.



one week after admission to the clinic. Complained of no discomfort on taking the capsules. Urinalyses averaged 0.04 mg. bismuth percent on four occasions, and each time 3 to 4 plus albumin and many pus and epithelial cells were present. The patient took the drug over 104 days without any reaction or undue effects, with the exception that there was continuous albumin in the urine. When the patient was finally put on Mapharsen, the albumin became negative with very few pus and epithelial cells present. The Kahn test, however, was still positive at the end of the 104th day.

No. 4. One patient, admitted to the clinic with secondary syphilis was given 24 neoarsphenamine injections and 34 bismuth injections and then was put on Sobisminol for a month. At the end of this period, she was found to be approximately one month pregnant. Complained of nausea for four days following the beginning of Sobisminol by mouth; no diarrhea. After one week of Sobisminol treatment, the nausea disappeared and the bismuth content in the urine was 0.04 mg. bismuth percent and there were a few pus cells. Albumin at the end of this period was two plus, with increase in pus cells; bismuth content of the urine showed .02 mg. bismuth percent.

No. 5. A 19 year old white male, admitted with a positive Kahn, a healing chancre at the corona of glans and secondary skin lesions on chest, was given Sobisminol capsules for a period of 14 days. At the end of that time the Kahn reaction was doubtful, the chancre was practically healed and the skin lesions had almost disappeared. The patient complained of nausea and vomiting, vertigo and disturbed vision following Sobisminol capsules, so they were discontinued.

No. 6. A 23 year old colored male began taking Sobisminol after 16 injections of bismuth intramuscularly and 8 injections of 0.45 gm. neoarsphenamine intravenously. Blood gave a doubtful Kahn reaction when he began the Sobisminol and showed no change at the end of two months. Complained, for three days after beginning the Sobisminol, of severe abdominal cramps and diarrhea which was worst on the first day, had almost cleared up by the end of the third day and entirely disappeared on the fourth. Continued the drug over a period of two months, during which time no albumin was found in the urine and on three occasions urinalysis showed .04 mg. bismuth percent.

No. 7. A 41 year old colored male, admitted with early secondary syphilis, Kahn test positive and Darkfield negative, had a healing chancre just back of the corona. He received 7 injections of neoarsphenamine and 7 of bismuth before being given Sobisminol. Reported that he felt better systemically after taking the Sobisminol than he did under any other type of treatment. Remained on Sobisminol for approximately three months. Had no reactions to the drug. Urinalysis was negative for albumin and bismuth content of the urine was also negative on the two occasions that urine could be obtained for examination.

No. 8. A 32 year old colored male was admitted to the clinic with a positive Kahn and an ulcerated foreskin, which was thought to be a mixed infection due to a chancre and chancroid. After two weeks of therapy on Sobisminol the lesion healed entirely. Darkfield was done at time of admission to the clinic, but spirochetes were not found.

No. 9, 10, 11 and 12. Four patients complained with nausea, vomiting and headache. One of these complained so much each time the drug was taken that it was discontinued after two weeks. However, the erythematous, macular eruption, which was diagnosed as recurrent secondary syphilitic lesions, improved considerably after taking the drug. The other three patients got over the nausea and vomiting after the third or fourth dose. Their urines contained from 0.04 to 0.2 mg. bismuth percent. None of the four had albumin, but all had an increase of epithelial cells.

No. 13. Another patient, who complained of nausea said, however, that she felt much better after taking Sobisminol than after taking any other drug she had received. This patient had a red, macular eruption which had been present three days before returning to the clinic after a lapse of three weeks. She had previously received 13 arsenical and 2 bismuth injections. This eruption cleared up after taking Sobisminol for 14 days.

No. 14. One patient in this series was given the drug for a period of four months; during this period he had 14 urinalyses for the detection of bismuth, all of which showed 0.04 mg. bismuth percent, with the exception of the first and eighth weekly urinalyses, which showed 0.2 mg. bismuth percent. No albumin found during the administration of Sobisminol except a slight trace after the first week on the drug.

No. 15. Another patient tolerated the

drug well and had no complaints. Urine contained no albumin but averaged 0.4 mg. bismuth percent at each urinalysis.

No. 16 and 17. Two patients were given the drug for periods of three months and two weeks respectively, and showed no unusual reactions.

**EARLY LATENT SYPHILIS:** No. 18. A 31 year old white male began to take Sobisminol in an early latent stage of syphilis and continued over a period of two months. Urine showed, on the first examination after a week of taking the drug, 0.04 mg. bismuth percent, with no albumin; two weeks later the bismuth content of the urine was 0.08 mg. bismuth percent; a third examination after six weeks continuous therapy showed still no albumin present and .04 mg. bismuth percent. The only voluntary complaint the patient made during this time was that he was constipated and had had, after starting the drug, a slight headache which disappeared after the first week.

No. 19, 20 and 21. Of the remaining three patients in this stage of the disease, one complained of nausea following Sobisminol; another tolerated it well, but pregnancy was diagnosed and the drug discontinued; and the third remained on the drug only a week.

**LATE LATENT SYPHILIS:** Of 13 patients with late latent syphilis 10 complained of nausea, but only two had to be taken off the drug because of increasing nausea and vomiting. One of these patients complained of griping pains and that there was a small amount of blood in the vomitus. Five patients stated that nausea gradually disappeared and one complained of dizziness with nausea. Two patients complained of constipation while taking the drug; one of these took the drug for three months and the other for five. Three patients volunteered the information that they felt much better on this drug.

Patients in this group were on the drug for an average of two months with the exception of one who was kept on Sobisminol for five months. Urinalyses ranged from 0.04 to 0.4 mg. bismuth percent; albumin was negative in 12 patients and there was no abnormal amount of pus cells present in any of the numerous analyses made on these 13 patients.

No. 22. One patient complained of dizziness with nausea and had a persistent diarrhea while on the drug and it was discontinued after two weeks because of this reaction. A macular rash appeared on her

body after she had taken the capsules for one day, but it disappeared after the second day and did not reappear.

No. 23. Another patient, after taking the bismuth for about seven days, complained of griping, nausea and vomiting. When the dose was reduced to 1 capsule, the complaints diminished in severity. A definite bismuth line appeared on the gums after 21 days on the drug and the vomitus contained a little blood. Headaches were severe and the drug was discontinued. The urine showed only a trace of albumin and a few pus cells during the three weeks the patient was taking the drug.

No. 24. Another patient, who remained on the drug for approximately five months, showed a slight bismuth line on the gums which appeared more definitely marked at times, almost disappearing and then reappearing. The urine showed from 0.04 mg. bismuth percent to 0.2 mg. bismuth percent at each weekly examination, and albumin was found only once during this period. Only a few pus cells were present and they did not seem to increase during administration of the drug.

No. 25. Still another patient, after having taken the bismuth for about two months had a faint bismuth line on the gums. However, there was remarkable improvement and the patient gained ten pounds in six weeks. The choking sensation of which she complained when taking a course of Mapharsen, cleared up entirely under Sobisminol.

No. 26. The only criticism one patient had of the drug was she "just couldn't remember to take the capsules and would rather report for hip treatments than depend on memory to take the capsules."

Eight patients, No. 27, 28, 29, 30, 31, 32, 33 and 34; were kept on the drug for periods of time from two weeks to three months and had no reaction with the exception of slight nausea which was relieved in each case if a glass of milk was taken following the drug. The urine ranged from 0.04 to 0.4 mg bismuth percent and one patient showed slight trace of albumin.

**SYPHILIS OF THE CENTRAL NERVOUS SYSTEM:** No. 35. A 54 year old white male had been receiving bismuth and tryparsamide for a year and a half when admitted and was found to have a spinal curve elevated to Zone II. There was a history of a 4 plus spinal Wassermann in 1939 (said it was positive in 1937) and of frequent attacks of gastric pain, nausea and vomiting at fairly regular weekly intervals for five years. Began to improve rapidly after beginning



Sobisminol treatment, gained ten pounds over a period of two months and voluntarily reported that he felt better each week. After having been on the drug for approximately 2 months, complained of a mild attack of nausea and vomiting, the first he had had on this drug as compared to weekly attacks prior to taking it. The drug was continued and there was no recurrence of the nausea and vomiting. Urinalysis showed 0.04 mg. to 0.2 mg. bismuth percent, first trace of albumin appearing after he had been taking the drug for three months. At this time, he was given a two weeks rest from the drug. At the conclusion of that period, he requested that the drug be resumed, as he felt so much better on this drug than he had on any other that he had ever had. He has now been on Sobisminol for three months and his urine is showing an average amount of bismuth, with no trace of albumin. Patient has greatly improved and his mental condition is better than it has been for some time.

No. 36 and 37. Two of the other patients in this group had no reaction to the drug and felt improved. Both said that the gastric distress to which they had been accustomed had disappeared under Sobisminol. Albumin was negative in both patients and bismuth content of the urine averaged 0.04 mg. bismuth percent to 0.2 mg. bismuth percent.

No. 38. The fourth patient in this group also remained on the drug for approximately 3 months. He had no reaction to the drug during this period, except a slight bismuth line and constipation, and said he felt much better when taking this drug than when on any he had previously taken. His subjective symptoms markedly improved. He gained weight, adding ten pounds in three days during the fifth week on the drug. His urine showed 0.04 mg. to 0.2 mg. bismuth percent, albumin negative except during last week when only a trace was present.

**CARDIOVASCULAR SYPHILIS:** No. 39 through 47. The ages of the 9 patients with cardiovascular syphilis in this group averaged 39 years and included 4 white males, 1 negro male, 1 white female and 3 negro females. Four of these nine patients complained of slight nausea when first beginning Sobisminol by mouth. In each case, this cleared up after a day or two. One patient complained of diarrhea for a short period. Two of the nine patients had a faint bismuth line on the gums which

cleared up even while the drug was being continued. One had this symptom during five weeks but it cleared up shortly thereafter. This patient was on treatment for five months. In the case of the other, the bismuth line appeared at the beginning of the second month and cleared up at the beginning of the third month. This patient remained on the drug for four months. Seven of the nine patients reported feeling better, one of them stating he "never felt better in his life." This patient gained approximately 20 pounds while taking the drug over a period of two months. Albumin was negative in each case and there was no increase in pus cells even when the drug was continued. The average time the patients continued on the drug was 82 days, ranging from 2 to 20 weeks. Bismuth ranging from 0.04 mg. bismuth percent to 0.2 mg. bismuth percent was found in all specimens of urine.

One patient of this group complained of a slight diarrhea for one day during the fifth week of medication. The attack was not severe and the accompanying nausea was eliminated when milk was taken along with the drug.

Another patient who had been previously an irregular attendant to the clinic, felt so well after being on Sobisminol for three weeks that he, for the next several months, was a regular attendant at the clinic.

**CONGENITAL SYPHILIS:** No. 48. The one congenital patient who was given Sobisminol by mouth took the drug over a period of four months. The patient was a 20 year old white male and had been receiving other treatment for approximately one year. His diagnosis was Tardive Heredisyphilis with Interstitial Keratitis of the Right Eye. Responded very slowly to all previous treatment but after having been on Sobisminol for approximately two weeks, reported that he was feeling subjectively better. Complained of slight nausea which lasted for about twenty minutes after taking capsules and there was a slight bismuth line on the gums after approximately three months on the drug. During this period, the albumin was negative, only a few pus cells were present and bismuth content ranged from 0.04 mg. bismuth percent to 0.08 mg. bismuth percent. At the end of the fourth month patient said he felt much improved.

#### SUMMARY

Of the 48 patients under observation, 7 received Sobisminol for 2 weeks; 7 for 1 month; 12 for 2 months; 6 for 3 months; 12

for 4 months; 2 for 5 months and 2 for 6 months. Only 3 patients were taken off because of toxic manifestations.

In only 13 patients was albumin noticed after the beginning of Sobisminol by mouth; 24 patients did not have any evidence of albumin whatever during therapy.

29 patients showed increase in pus cells. The cellular count in the urine did not indicate any marked renal damage.

Practically all of the patients who remained on the drug for two weeks or more showed evidence of bismuth in the urine. It is realized that bismuth determination should be done on the total urinary output, but such a plan is not feasible in ambulatory patients who can make only weekly visits to the clinic.

All patients studied attended at intervals of one or two weeks, and while single specimens of urine may seem of no conclusive value, they do indicate that bismuth is present in the urine.

3 patients had a faint bismuth line, but it was not severe enough to warrant interruption of medication in any case.

18 patients had nausea and 6 had vomiting; 3 patients had diarrhea and 2 had dermatitis. All were mild and cleared up even during continuation of the drug.

In no case did there seem to be accumulated toxic effect from sustained medication. The patients with evident lesions all showed improvement.

It was strikingly observed that in the patients with neurosyphilis, the improvement in symptoms was remarkable and relief from symptoms remained as long as the patients were on the drug. These patients are still being followed to ascertain whether or not symptoms reappear when the drug is discontinued.

### CONCLUSIONS

It is fully realized that a complete evaluation of any drug must wait until the ultimate outcome is determined by many years of observation and study. This necessitates observation of patients over a long period. The same is true of any anti-syphilitic drug. For example, in late syphilis, the only index of therapeutic efficiency that could possibly be obtained is improvement of subjective symptoms, reversal of positive blood and involution of lesions, followed by good health and continued freedom from further late complications of syphilis.

One phase that the physician must consider when administering this drug is that when it is given orally, the patient has its control entirely in his own hands and the

physician must take the word of the patient that the drug is being taken. However, continued presence of bismuth in the urine is an indication that the drug is being taken and helps to substantiate the claims of the patient. Promiscuous use of the drug entails of course, the danger from self-medication and consequent severe reactions which may prove serious. At the same time, Sobisminol does furnish one method of continuous treatment whenever the patient cannot report to the clinic regularly. The majority of patients prefer taking capsules by mouth three times a day to one weekly intramuscular injection. We found this true in the cases of 47 of the 48 patients studied.

Some of the indications for using oral bismuth, rather than intramuscular injections are: excessively obese patients; inability to attend clinics regularly; undue pain after intramuscular therapy; and asymptomatic neurosyphilis. (Both tabes dorsalis and paresis patients have shown remarkable improvement.) One parietic patient had much better orientation on this drug than on any other.

Nausea and vomiting will be decreased when milk is taken with the drug and often eliminated entirely. Finally, we believe this drug, if given under the careful supervision of the physician, is an efficacious substitute, in many instances, for bismuth injections in carefully selected patients.

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2. The Sobisminol Mass used in this study was supplied by E. R. Squibb & Sons.

**Nutrition Mystery**—The nutritional role of about a dozen elements which appear in the human body in minute amounts is still a mystery to science, says Dr. David M. Greenberg, Associate Professor of Biochemistry at the University of California. Among these elements are aluminum, arsenic, boron, bromine, nickel, silicon, vanadium and tin. All are generally concerned with catalysis, or the speeding up of chemical reactions, in the body.



# Kentucky Medical Journal

Published Monthly By  
THE KENTUCKY MEDICAL ASSOCIATION  
Incorporated

Entered as second class matter October 22, 1906, at the Postoffice at Bowling Green, Ky., under act of Congress, March 8, 1879

Subscription Price .....\$5.00  
Edited Under the Supervision of the Council

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### NEXT MEETING LOUISVILLE

SEPTEMBER 29—OCTOBER 3, 1941

## COUNTY SOCIETY REPORTS

**Fleming:** At the suggestion of the health officer there was a called meeting of the Fleming County Medical Society with the following members present: Drs. Garr, Bradshaw, Allen and Orsburn, to discuss what health measures should be adopted as the result of the recent flash flood.

The following resolutions were passed: That, whereas the recent heavy rains covered many water supplies in several sections of the county thus potentially endangering the safety of the water in them for drinking or use for washing vegetables or other food to be eaten raw; now, therefore in an effort to prevent any outbreak of typhoid fever or other diarrhoeal conditions, be it resolved that the Fleming County Medical Society recommends that everyone whose drinking water showed any turbidity after the aforesaid rains, that they boil the water used from them for drinking or for cleansing foods to be eaten raw.

Furthermore, realizing that immunization is an important factor in prevention of typhoid fever, everyone who has not had the typhoid immunization within the past 2 years is urged to go to their family physician at once and get this protection.

It was voted that a clinic be held at the health department for those who might be referred there for the immunization.

ROY ORSBURN, Secretary

**Hopkins:** The Hopkins County Medical Society held its regular monthly meeting August 14, at the Hospital. A guest of the Society was Dr. Talbott of Outwood. Program consisted of a paper by F. A. Scott on "Infant Nutrition." Those present were: Drs. J. E. Haynes, C. R. Morton, A. F. Finley, M. S. Veal, Wm. H. Garnier, W. F. Stucky, I. J. Townes, J. R. Corum and Clyde H. Foshee.

WM. H. GARNIER, Secretary

**Letcher:** The regular meeting of the Letcher County Medical Society was held on July 19th at Whitesburg. Dr. R. B. Howard of McRoberts, and Drs. J. E. Johnson and W. P. Stephens of Jenkins, were inducted into military service as reserve officers. The following memorial resolution was adopted:

Whereas, death has removed from us Dr. Edwin F. Sheppard, a revered and honored member of our profession, therefore, be it resolved:

That in his death the community and county has lost a most useful citizen, our society a loyal member, a zealous helper and wise counsellor. He was a modest and sincere gentleman of the highest type; he was charitable and con-

siderate at all times, gentle and easy to be entreated, full of mercy and good fruits in his work of mending broken human bodies.

That it has pleased the Master of the Universe to remove Dr. Sheppard from his arduous field of labor to his well earned rest, we express our sorrow for his untimely death, our appreciation of his great life of service and achievement, for the influence and inspiration which he passed, a sorrow is in each heart and a shadow on each brow.

That we extend our deepest sympathy to the bereaved widow and daughters. They may be assured, that we too grieve with them in the loss of this good man, our esteemed co-worker. That a copy of these resolutions be spread upon the records of the Medical Society of Letcher County and that a page in the record book be devoted to his memory.

That a copy be sent to the widow, daughters, the Mountain Eagle, the Neon News and the Journal.

When a good man dies  
For years beyond our ken  
The light he leaves behind lies  
Upon the path of men.

#### Committee:

E. K. Munn  
G. D. Ison  
Earnest Skaggs  
B. C. Bach  
J. E. Stanfill

There being no further business, the society adjourned.

F. D. WILLEY, Secretary

**Rockcastle:** The Rockcastle County Medical Society has met regularly during the year, the first Friday in each month at the Dixie Boone Hotel, Mt. Vernon. At each meeting papers have been presented by the members or guests and the discussions have been as interesting and valuable as the papers.

LEE CHESTNUT, Secretary

#### NEWS ITEMS

The American Neisserian Medical Society announces an annual prize of one hundred dollars, to be known as the P. S. Pelouze Award, to be presented to the person under thirty-five years of age who, in the opinion of the Committee of Awards, has made the outstanding contribution to the control of the gonococcal infections during the preceding year.

Nominations for the award should be sent to the Secretary, Oscar F. Cox, M. D., 457 Commonwealth Ave., Boston, Mass., not later than March 31 of each year. The winner will be announced at the subsequent annual meeting of the Society.

Dr. Scott D. Breckinridge, 59, widely known gynecologist and obstetrician, died August 1, at his home on Russell Cave Pike, Lexington, after several months' illness.

He underwent a major operation at St. Joseph's Hospital last February.

He was widely known as a maternal health specialist, humanitarian, churchman and sportsman. An expert fencer, he was instructor in the art at the University of Kentucky.

He was the guiding spirit in the organization of the Dudley Journal Club of Lexington, composed of medical men who met monthly for exchange of ideas.

Dr. Breckinridge was born in San Francisco, Calif. He attended Lafayette College at Easton, Penn., and the United States Military Academy at West Point. He entered Georgetown University at Washington for the study of medicine, graduating in 1907.

Dr. J. L. Allen, died at St. Joseph's Infirmary. He had practiced medicine in Louisville for twenty years and in 1939 moved to Loretto. He was a graduate of the University of Louisville School of Medicine, and a native of Meade County.

The Station Hospital, Fort Thomas, under the supervision of Major Arthur J. Redland, M. D. has been added to the list of approved laboratories. This makes a total of eighty-two at the present time. A complete list may be found in the August Journal.

The Seventh Annual Meeting of the Mississippi Valley Medical Society, "The Mid-West's Greatest Intensive Post-Graduate Assembly for General Practitioners" will be held in the Hotel Montrose, Cedar Rapids, Iowa, October 1, 2, 3. The program will be given by 30 clinician-teachers who will give over 40 lectures, demonstrations, round table discussions. For further information write to the Secretary, Harold Swanberg, M. D. W. C. U. Building, Quincy, Illinois.

The National Foundation For Infantile Paralysis, Inc., announces the following locations and owners of respirators in Kentucky:

Ashland—40 and 8 Club, American Legion.

Lexington—Good Samaritan Hospital, St. Joseph Hospital.

Louisville—Kosair Crippled Children Hospital, Louisville City Hospital.

Newport—Speer's Hospital (Owned by American Legion).

Dr. Fred C. Dye announces the opening of his office in 910 Brown Building, Louisville. Practice limited to Anesthesia.



Dr. George P. Sprague, Jr. son of Dr. George P. Sprague, will return to High Oaks Sanatorium, Lexington, on September 1st, 1941 from the East, where for the past fourteen years he has been specializing in Psychiatry. For the last ten years he has been the psychiatrist in charge of the men's division of the New York Hospital's psychiatric department in White Plains, New York. Previously he had been with the Iowa State Psychopathic Hospital and was the assistant professor of psychiatry in the Iowa University Medical School. He returns to his home in Lexington to take over the duties of Superintendant and owner of High Oaks Sanatorium. It will continue its functions in the expert care and treatment of psychiatric patients, including mental and nervous problems and liquor and drug addictions.

The Surgeon General of the U. S. Navy has announced that the next examination for entrance into the regular navy as commissioned officers in the Medical Corps will be held for Acting Assisting Surgeon (Intern) on October 6, 1941, January 5, 1942 and for Assistant Surgeon, August 11, 1941, October 6, 1941 and January 5, 1942.

Dr. Lenore Patrick, Secretary of the Grant County Medical Society has resigned this honored position and has accepted the position of staff Physician in Maternal and Child Health and Pediatric Consultant to the State Board of Health, of Madison, Wisconsin.

Dr. C. M. Eckler, Williamstown, has been appointed to take her place.

The Second Congress on Obstetrics and Gynecology will be held in St. Louis, April 6-10, 1942. The program is in charge of Dr. E. P. Plass with Dr. W. F. Meugert, Secretary.

#### BOOK REVIEWS

**PROCTOLOGY FOR THE GENERAL PRACTITIONER**—By Frederick C. Smith, M. D., M. Sc. (Med) F. A. P. S. Formerly Associate in Proctology Graduate School of Medicine, University of Pennsylvania, 466 pages with 161 illustrations and 5 color inserts, cloth \$4.50. F. A. Davis Company, 1914 Cherry Street, Philadelphia, Publishers.

The writer presents this new second edition with many original new illustrations and other new features which add to its many splendid aids on every day proctology. It is designed for the general practitioner and out-lines a simple technic of how to manage hemorrhoids, pruritus ani, flatulence, intestinal parasites, the various diarrheas, constipation and many other common ailments.

Anorectal symptomatology is carefully covered, stressing etiology and pathology. The orderly steps of examination are clearly set down. Treatment is covered in great detail, furnishing many valuable prescriptions and describing the technic of those many valuable office and bedside operations which may be performed by the general practitioner.

**HANDBOOK OF LABORATORY TECHNIC**—By Josephine M. Galloway, B. A. B. S. R. T. Formerly Director, Clinical Laboratory St. Luke's Hospital and Northern Michigan Children's Clinic, Maryville, Michigan, 48 illustrations. Bibliography, 256 pages. Published by F. A. Davis Company, Philadelphia, 1941. Price \$3.00.

This laboratory manual covers general laboratory tests, with a section devoted to the new procedures used in determining amounts of vitamins and sulfonamides present in body tissues. In general, the subject is not too well presented. At times the chapters are intended for student nurses institutions, rather than for the laboratory technicians proper. The first half of the book is very elementary in its approach; on the other hand the last half presents complex chemical procedures in great detail.

As a whole the book does not approach the standard which has been reached by many other texts in this field.

**MILK SICKNESS CAUSED BY WHITE SNAKEROOT**, By Edwin Lincoln Mosely, Professor Emeritus of Biology, State University, Bowling Green, Ohio; Past-president of Ohio Academy of Science. Published jointly by the Ohio Academy of Science and The Author. Bowling Green, Ohio. Price \$1.00.

This disease proved to be a mysterious scourge to the early settlers of the West, and in the opening chapters of the History of Abraham Lincoln, Nicolay and Hays say Nancy Hanks died of Milk Sickness. Whole villages at that time were depopulated.

This monograph gives the history of this disease and the various theories as to how it is caused, symptoms and includes the results of observation and experimentation by the author and others.

**PHYSICAL MEDICINE**.—By Frank H. Krusen, M. D., F. A. C. P. Associate Professor of Physical Medicine, the Mayo Foundation, University of Minnesota; Head of the Section on Physical Therapy, The Mayo Clinic; Member of the Council on Physical Therapy of the American Medical Association; Past President of the American Congress of Physical Therapy; Past President of the Academy of Physical Medicine.

846 pages with 351 illustrations. Philadelphia and London: W. B. Saunders Company, 1941. Price \$10.00.

Based on an experience with 50,000 patients at the Mayo Clinic this volume gives the latest technics in physical medicine, and tells in detail how to effectively apply those technics in dealing with scores of diseases that every physician, surgeon or specialist must treat.

All phases of physical medicine, thermotherapy, light therapy, electro therapy, hydrotherapy, mechanotherapy and the use of tested diagnostic methods are described.

---

**CARDIAC CLASSICS**—a Collection of Classical Works on the Heart and Circulation with Comprehensive Biographic Accounts of the Authors. Fifty two contributions by fifty one Authors by Frederick A. Willus, M. D., M. S., (Med) Chief, Section of Cardiology, the Mayo Foundation for Medical Education and Research, The Graduate School, The University of Minnesota and Thomas E. Keys, A. B., M. A. Reference Librarian, The Mayo Clinic, Formerly Carnegie Fellow, The Graduate Library School University of Chicago, C. V. Mosby Company, St. Louis, Publishers. Price \$10.00.

This magnificent volume gives a detailed description of all the ancient writers on the heart and circulation, tracing the history of the disease of the heart and circulation to the present time. It is splendidly illustrated and there is included in the present volume all the cardiac classics.

---

**TEXTBOOK OF PEDIATRICS**:—By J. P. Crozer Griffith, M. D., Ph. D., Emeritus Professor of Pediatrics in the Univ. of Pennsylvania; Consulting Physician to the Children's Hospital, Philadelphia; Consulting Physician to St. Christopher's Hospital for Children; Consulting Pediatricist to the Woman's, the Jewish, and the Misericordia Hospitals, etc.; and A. Graeme Mitchell, M. D., B. K. Rachford Professor of Pediatrics, College of Medicine, University of Cincinnati; Medical Director and Chief of Staff of the Children's Hospital of Cincinnati; Director of the Children's Hospital Research Foundation; Director of Pediatric and Contagious Services in the Cincinnati General Hospital. Third Edition, Revised and Reset. 991 pages with 220 illustrations. Philadelphia and London: W. B. Saunders Company, 1941. Price \$10.00.

The new third edition has been entirely rewritten by Dr. A. Graeme Mitchell. It has been broadened in its scope. It now covers not only the diseases of children, from infancy through

puberty but also the growth, development and management of the normal child and measures to keep the healthy child well. All the newest treatments are out-lined in detail including the latest knowledge of vitamins and the new diets.

There are chapters on mental and emotional growth and development and coccidioidomycosis. The very latest application of endocrinology to pediatric practice is included. There are extensive chapters on diabetes and infantile paralysis and particular attention is given such important subjects as the common cold, influenza, common poisons, hemorrhage in the newborn, asphyxia neonatorum, etc.

---

**THE ESSENTIALS OF APPLIED MEDICAL LABORATORY TECHNIC. DETAILS OF HOW TO BUILD AND CONDUCT AN OFFICE OR SMALL HOSPITAL LABORATORY AT SMALL COST.** J. M. Feder, M. D., Director of Laboratories and Allergic Service, Anderson County Hospital, Anderson, S. C. Charlotte Medical Press, Charlotte, N. C., 1940. 241 pages with many illustrations.

To a physician who is planning to begin a small laboratory this new volume on clinical laboratory procedures will be invaluable. It outlines the equipment required in an excellent manner. To a student beginning the study of laboratory technique, the step by step full page diagrams will be more helpful than many a lecture.

The techniques given are up-to-date and represent improvements over many older methods which are in use at the present time. For example, Pukof's method of guinea pig inoculation for tuberculosis in which a result can be gotten within ten to twelve days is given, and oxidase reaction for the cultural identification of gonococci is thoroughly discussed.

The volume throughout is filled with the useful hints and short-cuts which are the result of the author's years of experience in this field.

---

**THE DOCTOR TAKES A HOLIDAY**—An Autobiographical Fragment, by Mary McKibbin-Harper, M. D., a book fellow book, The Torch Press, Cedar Rapids, Iowa, Publishers.

This book essentially one of travel in the Orient, is sociological in its scope, and describes native customs, religion and superstition. It tells of men and women doctors and may be used as a guide to the East and for information as to the work of foreign medical colleagues.

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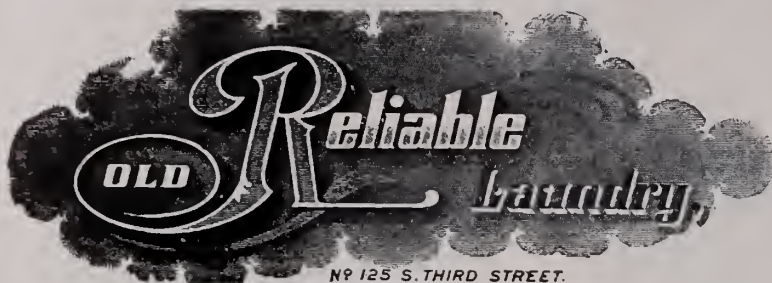
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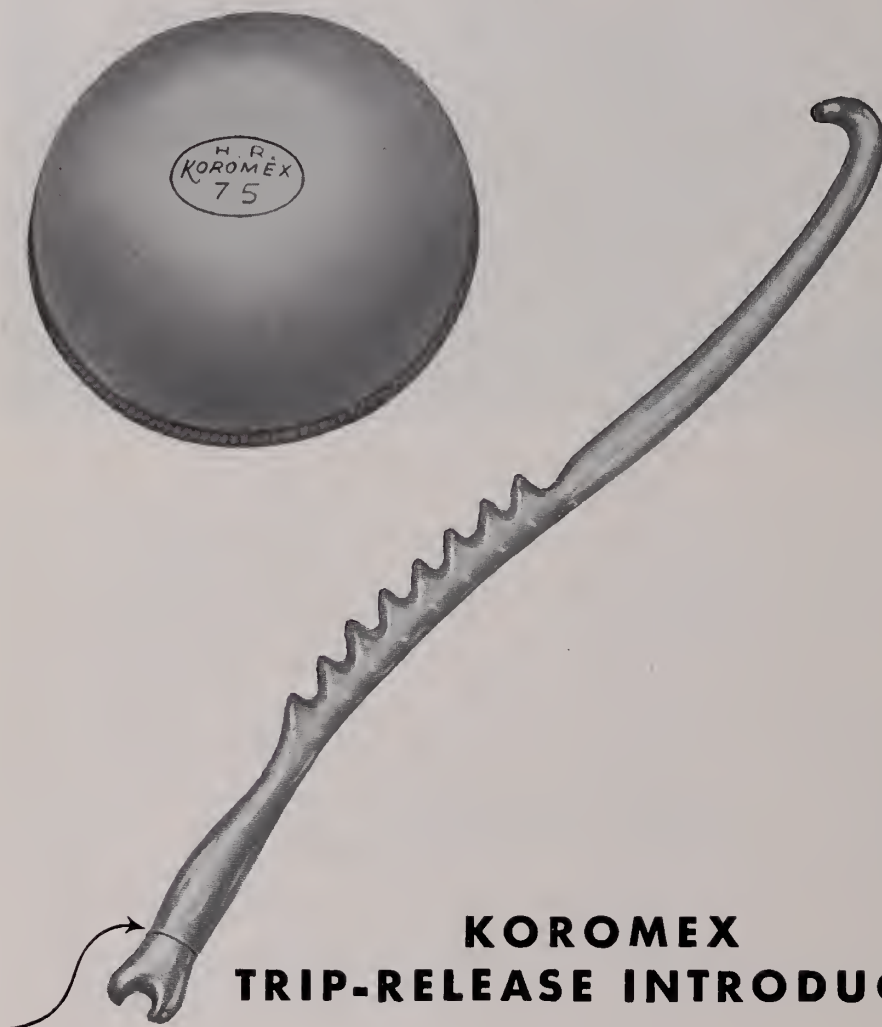
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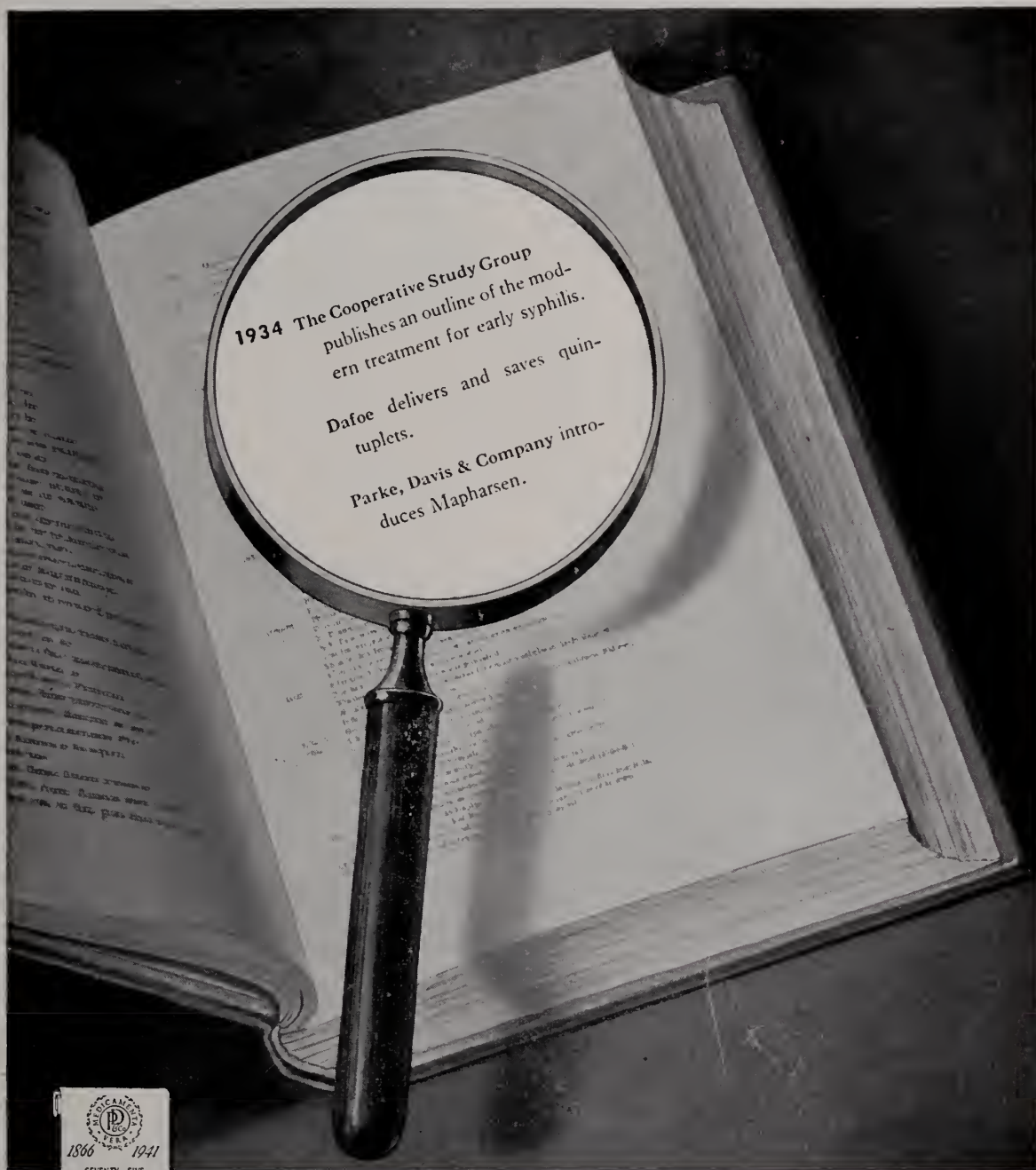
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One of a series of advertisements commemorating three-  
quarters of a century of progress and achievement



## PARKE, DAVIS & COMPANY

PIONEERS IN RESEARCH  
ON MEDICINAL PRODUCTS

## As an Adjunct in the Treatment of ALCOHOLISM

ONE of the newest and most interesting uses for which Benzedrine Sulfate has been accepted by the Council on Pharmacy and Chemistry of the A. M. A. is as an adjunct in the treatment of chronic alcoholism and also in alcoholic psychoses, although best results are reported in states of intoxication in which no psychosis is demonstrable. The articles listed below represent the most comprehensive work which has been done to date in this field.

Reifenstein, E. C. Jr. and Davidoff, E.: The Treatment of Alcoholic Psychoses with Benzedrine Sulfate—J. A. M. A., 110:1811, 1938.

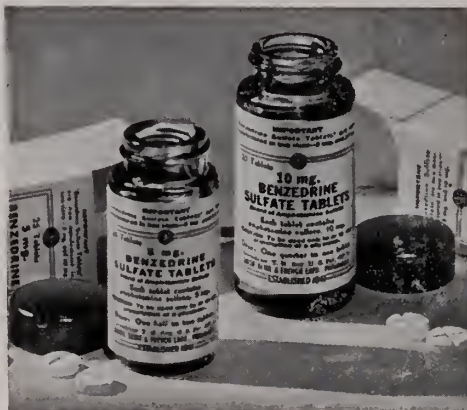
Reifenstein, E. C. Jr. and Davidoff, E.: The Use of Amphetamine (Benzedrine) Sulfate in Alcoholism With and Without Psychosis—N. Y. State Med. J., 40:247, 1940.

Bloomberg, W.: Treatment of Chronic Alcoholism with Amphetamine (Benzedrine) Sulfate—New Eng. J. of Med., 220:129, 1939.<sup>1</sup>

<sup>1</sup>*Since this report, Bloomberg has enlarged his series to 60 cases which he reported on Dec. 28, 1940, at the annual meeting of the American Association for the Advancement of Science in Philadelphia. His results in this larger series were substantially the same as those in his original report.*

### ADMINISTRATION

Initial dosage should be small (2.5



to 5 mg.) and should be increased progressively until the desired effect is obtained.

**IN CHRONIC ALCOHOLISM**  
the normal dosage used by Bloomberg was 20 mg. daily, one-half of the dose on rising and the other half at noon, but this was often adjusted to meet the requirements of the individual patient.

**IN ALCOHOLIC PSYCHOSES**  
the normal dosage used by Davidoff and Reifenstein in institutionalized patients was 20 to 30 mg. orally or intravenously\* in a single dose.

**IMPORTANT!** In prescribing Benzedrine Sulfate Tablets, please be sure to specify the tablet-size desired—either 5 mg. or 10 mg.

\*Physicians wishing to use Benzedrine Sulfate Ampules may obtain them on direct order from us.

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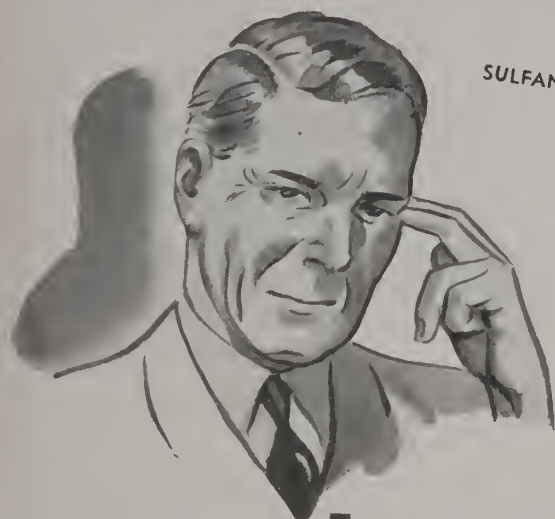


Brand of amphetamine sulfate

SMITH, KLINE & FRENCH LABORATORIES, PHILADELPHIA, PA.



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SULFANILAMIDE

WHICH SHALL I USE  
FOR GONORRHEA?

SULFAPYRIDINE

WHAT'S GOOD FOR "STREP"?

SULFATHIAZOLE

WHICH PRODUCES  
BEST RESULTS  
IN PNEUMONIA?MY PATIENT HAS A "STAPH"  
INFECTION—WHAT SULFONAMIDE  
IS MOST EFFECTIVE?

The sulfonamide compounds continue to grow in importance. Three separate drugs have been accepted by the Council on Pharmacy and Chemistry of the A. M. A. Another has been submitted for acceptance. We present on this page the "box score" on three "sulfa" drugs now in widespread use.

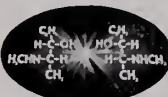
	Sulfanilamide N.N.R.	Sulfapyridine N.N.R.	Sulfathiazole N.N.R.
CHEMICAL NAME	(p-amino-benzene sulfonamide)	(2-sulfanilyl aminopyridine)	(2-sulfanilyl aminothiazole)
SOLUBILITY in 100 cc. of water at 37.5° C.	1480 mg.	54 mg.	96 mg.
PHARMACOLOGY	Relatively uniform and rapid.	Irregular and often poor.	Uniform—very rapid.
Absorption			
Distribution	In all body fluids.	In all body fluids.	In blood but poorly in other body fluids.
Excretion	Rapid.	Slower than Sulfanilamide.	Rapid.
Tendency to conjugation.	Slight.	Marked.	Moderate.
CHEMOTHERAPY			
★ Preferred Drug.			
● Also Effective.			
Colon Bacillus			★
Dysentery Bacillus			●
Gonococcus		●	★
Lymphogranuloma Venereum	●	●	★
Meningococcus	●	★	●
Pneumococcus		★	★
Staphylococcus		●	★
Streptococcus	★	●	
HOW SUPPLIED BY SQUIBB			
Tablets	5 grain in bot. of 100, 500, 1000. 7½ grain in bot. of 25, 100, 1000.	0.5 gram in bot. of 50, 100, 1000.	0.5 gram in bot. of 50, 100, 500, 1000.
Powder	4 oz. Rx. bottle.	5 gram vials.	
Crystals	10 gram ampuls, box of 5 and 25.		5 gram vials.
Capsules		0.25 gram in bot. of 50, 100, 1000.	

**Specify**  
**SQUIBB**  
sulfonamides

When you think of **SULFONAMIDES**  
... think of **SQUIBB**

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1 LB. 2 OZ. NET (510 GM.)  
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A thoroughly cooked and dried, palatable mixed cereal food, vitamin and mineral enriched.

Composed of wheatmeal (farina), oatmeal, wheat germ, yellow cornmeal, powdered beef bone, specially prepared for human use, sodium chloride, powdered dehydrated alfalfa, powdered yeast and reduced iron, cooked thoroughly and dried.

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KEEP IT



# KENTUCKY MEDICAL JOURNAL



N.Y. ACADEMY  
OF MEDICINE

OCT 18 1941

LIVERPOOL

Published Monthly by the Kentucky State Medical Association Under the Supervision of the Council

VOL. 39, No. 10

BOWLING GREEN, KY.

OCTOBER, 1941

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Editorial and Business Offices, 519 Tenth Street

Entered as second-class matter, Oct. 22, 1916, at the Postoffice at Bowling Green, Ky, Acceptance for mailing at special rates postage provided for in Section 1103, act of October 6, 1917, authorized May 25, 1920.

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(DUE TO NEISSERIA GONORRHEAE)



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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph., Gon. & Ven. Dis.*, 23, 201 (March), 1939.

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\*Facts from: *Proc. Soc. Exp. Biol. & Med.*, 1934, 32,241  
*N. Y. State Jour. Med.*, Vol. 35, No. 11,590 *Arch.*  
*Otolaryngology*, Mar. 1936. Vol. 23, No. 3,306



## CALENDAR OF COUNTY SOCIETY MEETINGS

COUNTY	SECRETARY	RESIDENCE	DATE
Adair.....	Todd Jefferies.....	Columbia.....	October 1
Allen.....	A. O. Miller.....	Scottsville.....	October 22
Anderson.....	J. B. Lyen.....	Lawrenceburg.....	October 6
Ballard.....	F. H. Russell.....	Wickliffe.....	
Barren.....	R. E. Hayes.....	Glasgow.....	October 15
Bath.....	H. S. Gilmore.....	Owingsville.....	October 13
Bell.....	Edward S. Wilson.....	Pineville.....	October 10
Boone.....	R. E. Ryle.....	Walton.....	October 15
Bourbon.....	B. N. Pittenger.....	Paris.....	October 16
Boyd.....	R. W. Gardner.....	Ashland.....	October 7
Boyle.....	P. C. Sanders.....	Danville.....	October 21
Bracken-Pendleton.....	W. A. McKenney.....	Falmouth.....	October 23
Breathitt.....	M. E. Hoge.....	Jackson.....	October 21
Breckinridge.....	John E. Kincheloe.....	Hardinsburg.....	
Bullitt.....	George B. Hill.....	Mt. Washington.....	
Butler.....	D. G. Miller, Jr.....	Morgantown.....	October 1
Caldwell.....	W. L. Cash.....	Princeton.....	October 7
Calloway.....	J. A. Outland.....	Murray.....	October 2
Campbell-Kenton.....	W. V. Pierce.....	Covington.....	October 2
Carlisle.....	E. E. Smith.....	Bardwell.....	October 7
Carroll.....	H. Carl Boylen.....	Carrollton.....	October 14
Carter.....	Don E. Wilder.....	Grayson.....	October 14
Casey.....	Wm. J. Sweeney.....	Liberty.....	October 23
Christian.....	Geo. E. Pryor.....	Hopkinsville.....	October 21
Clark.....	Robert E. Strode.....	Winchester.....	October 17
Clay.....	L. H. Wagers.....	Manchester.....	October 14
Clinton.....	S. F. Stephenson.....	Albany.....	October 18
Crittenden.....	C. G. Moreland.....	Marion.....	October 13
Cumberland.....	W. Fayette Owsley.....	Burkesville.....	October 1
Daviess.....	T. H. Milton.....	Owensboro.....	October 14 & 28
Elliott.....	W. H. Joyner (Acting).....	Sandy Hook.....	
Estill.....	Virginia Wallace.....	Irvine.....	October 8
Fayette.....	Douglas E. Scott.....	Lexington.....	October 14
Fleming.....	Roy Orsborn.....	Flemingsburg.....	October 8
Floyd.....	Robert M. Sirkle.....	Weeksbury.....	October 29
Franklin.....	Thomas P. Leonard.....	Frankfort.....	October 2
Fulton.....	M. W. Haws.....	Fulton.....	October 8
Gallatin.....			October 16
Garrard.....	J. E. Edwards.....	Lancaster.....	October 16
Grant.....			October 15
Graves.....	H. H. Hunt.....	Mayfield.....	October 7
Grayson.....			
Green.....	S. J. Simmons.....	Greensburg.....	October 6
Greenup.....	L. C. Bate.....	Greenup.....	October 10
Hancock.....	F. M. Griffin.....	Hawesville.....	October 6
Hardin.....	D. E. McClure.....	Elizabethtown.....	October 9
Harlan.....	W. E. Riley.....	Harlan.....	October 18
Harrison.....	W. B. Moore.....	Cynthiana.....	October 6
Hart.....	Maher Speevack.....	Munfordville.....	October 7
Henderson.....	J. Leland Tanner.....	Henderson.....	October 13 & 27
Henry.....	Owen Carroll.....	New Castle.....	October 9
Hickman.....	H. E. Titsworth.....	Clinton.....	October 2
Hopkins.....	Wm. H. Garnier.....	Madisonville.....	October 9
Jackson.....			October 4
Jefferson.....	B. W. Smock.....	Louisville.....	October 6 & 20
Jessamine.....	J. A. VanArsdall.....	Nicholasville.....	October 23
Johnson.....	A. D. Slone.....	Paintsville.....	October 27
Knott.....			October 25
Knox.....	T. R. Davies.....	Barbourville.....	October 16
Larue.....			
Laurel.....	Oscar D. Brock.....	London.....	October 8
Lawrence.....	L. S. Hayes.....	Louisa.....	October 20
Lee.....	A. B. Hoskins.....	Beattyville.....	October 11
Leslie.....	John H. Kooser—(Acting).....	Hyden.....	
Letcher.....	Francis D. Willey.....	Jenkins.....	October 28
Lewis.....			October 20
Lincoln.....	Lewis J. Jones.....	Hustonsville.....	October 17
Livingston.....	J. O. Nall.....	Smithland.....	
Logan.....	E. M. Thompson.....	Russellville.....	
Lyon.....	H. H. Woodson.....	Eddyville.....	October 7
McCracken.....	Leon Higdon.....	Paducah.....	October 22
McCreary.....	R. M. Smith.....	Stearns.....	October 6
McLean.....	Allen R. Will.....	Calhoun.....	October 9
Madison.....	Robert L. Rice.....	Richmond.....	October 16
Magoffin.....			
Marion.....	W. E. Oldham.....	Lebanon.....	October 28
Marshall.....	S. L. Henson.....	Benton.....	October 15

COUNTY	SECRETARY	RESIDENCE	DATE
Mason.....	C. W. Christine.....	Maysville.....	October 8
Meade.....	S. H. Stith.....	Brandenburg.....	October 23
Menifee.....	E. T. Riley.....	Frenchburg.....	
Mercer.....	J. Tom Price.....	Harrodsburg.....	October 14
Metcalf.....	E. S. Dunham.....	Edmonton.....	October 7
Monroe.....	George E. Bushong.....	Tompkinsville.....	
Montgomery.....	D. H. Bush.....	Mt. Sterling.....	October 14
Morgan.....			
Muhlenberg.....	E. L. Gates.....	Greenville.....	October 14
Nelson.....	R. H. Greenwell.....	Bardstown.....	
Nicholas.....	T. P. Scott.....	Carlisle.....	October 20
Ohio.....	Oscar Allen.....	McHenry.....	October 1
Oldham.....			October 7
Owen.....	K. S. McBee.....	Owenton.....	October 2
Owsley.....	W. H. Gibson.....	Booneville.....	October 6
Perry.....	Lewis C. Coleman.....	Hazard.....	October 13
Pike.....	F. H. Hodges.....	Pikeville.....	October 7
Powell.....	I. W. Johnson.....	Stanton.....	October 6
Pulaski.....	M. C. Spradlin.....	Somerset.....	October 9
Robertson.....			
Rockcastle.....	Lee Chestnut.....	Mt. Vernon.....	October 3
Rowan.....	A. W. Adkins.....	Morehead.....	October 13
Russell.....	J. R. Popplewell.....	Jamestown.....	October 13
Scott.....	A. Y. Covington.....	Georgetown.....	October 2
Shelby.....	C. Risk.....	Shelbyville.....	October 16
Simpson.....	L. R. Wilson.....	Franklin.....	October 14
Spencer.....			
Taylor.....	W. B. Atkinson.....	Campbellsville.....	October 9
Todd.....	B. E. Boone, Jr.....	Elkton.....	October 1
Trigg.....	Elias Futrell.....	Cadiz.....	October 14
Trimble.....			
Union.....	Bruce Underwood.....	Morganfield.....	October 7
Warren-Edmonson.....	W. O. Carson.....	Bowling Green.....	October 8
Washington.....	J. H. Hopper.....	Willisburg.....	October 15
Wayne.....	Frank L. Duncan.....	Monticello.....	
Webster.....	C. M. Smith.....	Dixon.....	October 31
Whitley.....	C. A. Moss.....	Williamsburg.....	
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Woodford.....	Geo. H. Gregory.....	Versailles.....	October 2

ALCOHOLISM  
SENILITY  
DRUG ADDICTION

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Established 1904

NERVOUS  
AND  
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BEAUTIFUL AND SPACIOUS GROUNDS AFFORD OUTDOOR RELAXATION

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# KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

VOL. 39, No. 10

BOWLING GREEN, KY.

OCTOBER, 1941

## EDITORIALS

### THE ANNUAL MEETING

The 1941 annual meeting ended just as this Journal was going to press. Never before in the history of the Association were so many valuable papers read and discussed, nor was the Association ever honored with so many distinguished guests from out of the state.

The meetings of the House of Delegates were exceptionally well attended, more of the counties being represented than usual. The Council Report should be read and studied by every county society, as in it the fiscal affairs of the Association are discussed in detail.

The full proceedings of the meeting will be published as usual in the next issue of the Journal. Read it carefully. The Association and the Journal belong to the members. It is they who decide the policies and so should, each and every one, keep themselves fully and accurately informed about the affairs of the Association and the Journal.

### USED SURGICAL INSTRUMENTS FOR GREAT BRITAIN

The Louisville Branch of the Bundles for Britain organization is joining with similar organizations in all the other cities in an appeal for used surgical instruments to be sent to the war front in England. The English hospitals have been repeatedly bombed and the destruction in equipment presents a problem in replacement that is very appealing. The close relationship between Great Britain and the United States makes us particularly interested in the welfare of our British brethren.

We hope very much that every reader of the Journal who has any surplus instruments that he or she can spare will send them to Bundles for Britain, Inc., 430 West Broadway, Louisville, Kentucky, as promptly as possible and they will be immediately transferred to the places where the need is established.

### THE VITAL ROLE OF THE PHYSICIAN IN THE PREMARITAL EXAMINATION LAW

The success or failure of the Premarital Law depends largely upon the degree of cooperation given and the judgment exercised by examining physicians. Members of the medical profession should bear constantly in mind their important responsibility in this connection.

The primary purpose of the Premarital Law is not to prevent all persons who have syphilis from marrying. Its chief object is to prevent the marriage of persons having syphilis in a communicable stage. Naturally, many problems will arise which will have to be left to the judgment of the individual physician. It is he who must decide whether or not the disease is in a communicable stage. If errors in this connection are made, it is better that they should be on the side of caution. Although many syphilitics may safely marry when treatment has brought the disease to a non-infectious stage or when it is in an old latent stage, some mistakes in judgment will naturally occur in determining when and if either condition exists. Honest mistakes in this regard are excusable. There can, however, be no alibi for carelessness, neglect or refusal to make a competent examination, or for wilful violation of the law.

A secondary purpose of the law, probably as important in its ultimate results as the primary object, is to bring to light unsuspected cases of the disease, in order that spread of the infection may be prevented and treatment started without further delay. The physician is the logical person to determine the existence of unsuspected infection and to explain the measures necessary to bring it under early control.

Another important feature of the Premarital Law lies in its educational value

in calling venereal disease in general to the public attention. Here, again, the physician performs an indispensable role. It is he who is best qualified to explain the need of prompt and adequate treatment and the measures necessary for securing such treatment.

The desired results can best be achieved only when physicians are careful to make the required examinations as thorough as possible and perform their jobs in keeping with the spirit and intention of the law. In a way, the reputation of the entire profession is at stake. Again, if we do not comply in every respect with the provisions of the Premarital Law, we are losing the best opportunity ever offered, perhaps, to the medical profession as a whole to render a truly great service in eradication of the greatest killer of human kind.

The Premarital Law does not modify, in any respect, the ordinary relationship between physician and patient. Physicians are entitled to charge a fair and just fee for each examination, the fee no doubt, to depend upon the economic circumstances of the individual examined. This is the rule in general medical practice, and these examinations should furnish no exceptions. Charging of exorbitant fees, however, by even a few physicians will reflect adversely upon the entire medical profession and so cause public resentment. The profession must, therefore, realize that the people will have a watchful eye on it in respect to charging for Premarital Law examinations.

The Ohio State Medical Journal for August carries an editorial from which we quote as follows:

"There are those who suggested writing into the law a schedule of maximum fees which physicians could charge for the examinations. Through the efforts of the Legislative Committee of the Ohio State Medical Association, this recommendation was not accepted by the General Assembly. However, the threat of standardizing examination fees through an amendment to the premarriage examination law remains. Members of the medical profession must make such action unnecessary. . . . Regardless of honest differences of opinion regarding the merits or demerits of this new Ohio statute, physicians have an obligation to meet and owe it to themselves, as well as the public, to see that reasons for justifiable criticism of the pro-

fession's part in the operation of the law are minimized, or better yet, eliminated. . . . The overwhelming majority of the physicians of Ohio will do the right kind of a job. Against the few who may try to cut the corners the penalty provisions of the law should be invoked."

Kentucky physicians, we trust, will continue to do their jobs in such a way as not to require invoking the penalty provisions written into the statute of this State.

While the Premarital Law limits the examination to syphilis, it need not be confined to this one particular venereal disease. As serology offers the most concrete evidence of the existence of syphilis, and even that is far from infallible, this disease is alone specified in the law. The physician may and should examine for the existence of other venereal diseases as well.

Standardization and improvement of our laboratories are an essential aid to the examining physician. Proper cooperation between the two is no less essential.

Under the Law, important duties and responsibilities are vested in the State Department of Health in the enforcement and administration of the Premarital Law. These duties and responsibilities include approval by the State Commissioner of Health of laboratories for serological tests and the providing of the necessary report forms for physicians and laboratories.

Persons applying for marriage licenses are requested not to ask the services of the State Department of Health in making the necessary serological examinations except in cases where the examining physicians certify that the applicants are unable to pay for tests made in an approved private laboratory. Results of tests made in any of the approved laboratories are reported to physicians in strictest confidence. Laboratories are approved according to standards set up by the National Committee on the Evaluation of Laboratories for the Serodiagnosis of Syphilis. Serological tests acceptable are the Eagle, Hinton, Kahn, Kline and Kolmer.

Kentucky physicians have been cooperating, to a gratifying extent, in the administration of the Premarital Law. It is hoped that this cooperation will continue, to the end that the Law may produce the best results of which it is capable for the benefit of all the citizens of the State.



## VICTUALS AND VITAMINS

In the good old days people ate "victuals" full of vitamins because the soil had not been leached of its health providing qualities. Moreover, all families had a garden, poultry yard and the thrifty housewife canned or dried fruit and vegetables enough to supply the family during the winter, while the neighboring mill ground the wheat and corn in an old fashioned stone grinder and the cow gave plenty of milk for the entire family. In one generation this picture has changed. From soup to nuts can now be purchased at a convenient grocery store. The price of milk is prohibitive in most urban families, and as yet the American public has added nothing to the diet as a substitute. Walk along the streets in the early morning of any crowded city, notice the legs of our young girls and boys and you will see the effect of the lack of proper nutrition, (hidden hunger) in their early childhood. Yet enough food of the health building types is available to all families if they will properly consider the food values of the ordinary farm products.

Potatoes cooked with skins and eaten in large quantities will prevent many of the nutritional diseases; they should not be peeled, boiled and the water thrown away, but must be consumed in their entirety. Caesar's Army marched on wheat, and the civilization of the world has ebbed and flowed with the wheat belts; yet in the midst of starvation the granaries of America are bursting with this valuable grain. Wheat may be consumed in its natural state as a cereal by simply soaking it overnight and cooking it the next day; in this way you will have a fine cereal with all the vitamins. Vitamin B1 is our most elusive vitamin. The yardstick for the consumption of this vitamin is 500 International Units a day. Ordinary white bread contains only six units and one ounce of enriched bread, 34; it can be amply secured in liver and pod vegetables, provided the pod is cooked along with its contents. The biggest and best source of Vitamin B1 is the wheat germ. A tablespoonful provides 190 International Units. This may be sprinkled over vegetables or eaten with cereal, berries or fruits, and may be purchased in bulk for six cents per pound. The essentials of diet and their vitamin content should be taught to every school child. A simple book on this subject should be included in the curriculum of all stud-

ents. Families who have small farms that will not support a cow should learn the art of raising goats as a milk supply as they do in some of the foreign countries. The lowly cabbage and turnip rival the citrus fruits in their vitamin content, and these can be buried in the good earth and preserved all winter. The popularizing of the use of the soybean as an article of diet will add greatly to the health of this country, as it rivals all other food products in nutritional elements.

Soybean milk may be made by soaking in water over-night a pound of the ordinary yellow soybean which the farmer plants for hay or cover crops, running them through a meat grinder the next day and adding a gallon of water, straining through cheese-cloth and cooking for twenty minutes. This will give a thick yellow milky substance that contains a high percentage of protein, some iron, phosphorus and calcium at the cost of three cents a gallon. This milk can be kept indefinitely if canned like tomato juice. Two or three glasses a day will suffice to meet the daily vitamin requirements regardless of what the rest of the diet may be. It contains in each quart the following vitamins: 5,000 units of Vitamin A, which builds up resistance to infections; 500 units of Vitamin B, which promotes growth, bowel action and digestion and prevents neuritis; 500 units of C, the anti-pellagra vitamin, which promotes growth and general nutrition and 500 units of Vitamin D and is a rich source of Vitamin E.

At the recent conference on Nutrition, the Director of Welfare, Mr. Paul McNutt stated 98,000,000 Americans were victims of hidden hunger, a descriptive name given to lack of proper nutrition.

Please bear in mind that no food article takes the place of milk or dairy products in the diet.

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HEMOLYSIS

To the physician sending in a blood specimen for testing, it is especially disappointing to receive a report stating that the specimen was so hemolyzed as to make the running of the test impossible. A Health Officer who had formerly had a great deal of trouble in this regard recently reported how he had reduced hemolyzed specimens to a minimum. "A little water," he writes, "left in the syringe at the time the blood is drawn, is the most common cause of hemolysis. If and when

the syringe to be used is permitted to cool without the plunger having been removed water will condense in the syringe and inevitably cause hemolysis. This unfortunate occurrence can be prevented by washing the syringe with a normal saline solution in cases where the person taking the specimen has neglected or failed to remove the plunger. Saline solution can be made by using one teaspoonful of salt to one quart of water, boiling the water. It may then be put into a clean, wide-mouthed bottle and kept on the desk for use. Hemolysis is caused by the red blood corpuscles rupturing and releasing hemoglobin which becomes dispersed into the blood serum."

It is impossible to make a test after hemolysis has occurred. Any physician who has any new technique for preventing this condition, will please send it to the Journal.

#### THE SOUTHERN MEDICAL ASSOCIATION

The 35th annual meeting of the Southern Medical Association will be held in St. Louis, Monday, Tuesday, Wednesday and Thursday, November 10-13. The official activities of the Association will begin on Monday rather than the usual day Tuesday as originally planned, and close Thursday afternoon at 6 P. M. With the exception of this one-half day change, the meeting will be as scheduled. The St. Louis program will begin Monday afternoon and will be concluded at noon on Tuesday, the program being short clinical presentation by physicians from St. Louis. Tuesday afternoon the general clinical session, a program arranged and conducted by the President, will be presented. Then from Tuesday noon through Thursday afternoon the nineteen sections of the Association and the three conjoint societies will be in session.

On Tuesday evening, as a feature of the General Session, Dr. Paul H. Ringer, President of the Association will deliver his presidential address, this to be followed by the President's reception and ball.

The Scientific Exhibits space has been completely filled which will insure one of the most interesting parts of the meeting.

All scientific activities will be at the St. Louis Municipal Auditorium, which is conveniently located to all the downtown hotels. If you are not already a member of this Association, write immediately to the Secretary, Empire Building, Birmingham, Alabama, and send your dues, \$4.

#### PRESIDENT'S ADDRESS

#### RESPONSIBILITIES OF MEDICINE

ELMER LEE HENDERSON, M. D.

Louisville

I appreciate very much the honor conferred upon me in my election as President of this Association. As I enter upon the discharge of my duties, I am mindful of my limitations and I shall rely largely upon your counsel and friendly suggestions. Of the cardinal virtues, Faith, Hope and Charity, I believe I can claim the first as my own. As your President, I shall use largely this "Faith" of mine in the "Hope" that you will exercise your "Charity" as to any shortcomings you may discover.

May I take this opportunity to extend my congratulations to our outgoing President and to express my appreciation of his accomplishments.

I feel sure you have not elected me for anything I have done in the past but for what you expect me to do in the future. I am very happy, as you can see, and yet in the sunshine of happiness there comes a ray of seriousness for well I realize that with this position, as with all duties of trust, there comes an obligation. I am sure the duties and responsibilities will be great and, as I see it, I cannot possibly bear this burden alone; therefore, I am appealing to you for help and support.

We want to practice the Golden Rule in our Association as much as possible. We should not be satisfied with merely "doing unto others as we would have them do unto us" or "living to let live." If we apply this axiom to our own lives by putting our house in order first, we will be better able to help our town, community, state or nation in a more ideal way.

You who have had a part in the accomplishments of this Association can look backward with pride and forward with confidence. Those who take an honest pride in the past have every right to have faith and courage for the future.

Again, I thank you for the position to which you have elevated me and assure you of my desire to justify the confidence you have placed in me. And permit me to express the hope that until I deliver over into other and worthier hands the charge that now rests upon me, I may do nothing to forfeit your favor or betray your confidence.

I hope to bring you something of a con-



structive nature. I want to assure you that I am highly desirous of making my year in your service a practical one. Above all things, I would have you know that this is your association and I am only your servant and I want to serve you as you would have me serve. This is not a one-man organization and I am not here to endeavor to accomplish the things in which I am personally interested. I am here to try to do the things you want done.

On the threshold of another milestone, it is our proud heritage that the achievements of the Kentucky State Medical Association are still on the credit side of the ledger to justify our continuation. With this background, our obligations for altruistic service are doubled. Invaluable as our aims are in themselves, they take on a deeper significance when they are considered as integral parts of a comprehensive program in our State, District and County Societies. It is my firm belief that our objectives are not beyond the attainable and can be realized by mutual agreement among the various interests and organized medicine. As I see it, our prime purpose is to have our state medical association fulfill the spirit and substance of service founded on loyalty and tradition. Thus may our vision of the past become the reality of today and the guiding star of the future.

Progress is not automatic. The world grows better because there are high-minded souls who wish that it should and because they will and dare to take the right steps to make it better. This is what the American Medical Association has been doing for years and is continuing to do for the benefit of the medical profession and those it is our pleasure and privilege to serve.

To plans which would benefit the people we serve, we offer our whole-hearted and unselfish support and we will oppose unsound doctrines which would eventually lower the standards of medical service to that found in other countries, where the physician is made subservient to political control.

Regardless of what may come, it is well to remember that if the Government cannot administer medicine any better than it administers many of its various bureaus, if it indulges in waste in medicine as it indulges in the administration of too many of its various activities, if it has as little regard for ability in its physicians as it has in many of its public servants, I fear

that the health of America would be in serious jeopardy. It is too frequently suggested that we turn from the system of private practice to some form of socialized or state medicine, to follow the lead of Germany and England. Our forefathers crossed the ocean to get away from the lead of European countries and by adopting different customs and ways built here the greatest civilization in history. By means of a calm and dispassionate marshalling of facts, let us redouble our efforts to convince the public that socialized medicine is "dehumanized" and "poor-house" medicine.

A physician has a great responsibility upon his shoulders. Health, happiness and life itself, depend upon our ability to diagnose a condition, to apply the specific remedy, to keep our nerves steady and our minds clear. To us has been intrusted the almost divine art of healing the sick, ushering into the world a new life, and giving peace to an earth-tired spirit and, because of this sacred trust, it is our duty not only to fit ourselves for the work, but to do all in our power to advance the science of medicine. We should encourage and advise and assist those who are fitted for its practice and forever drive from the fields of medicine and surgery those who are a menace to life and health and an insult to our noble calling.

For its own protection the public should be well acquainted with the method of selection, the qualifications required, and the licensing of men in medicine, and the reasons why the medical profession oppose the quack, the cultist, and the irregular practitioner. It should know the motives actuating those who emphasize the necessity of a basic scientific education before entering or practicing any branch of the healing arts.

Anyone who reviews the present teaching plan in our medical schools must admit that the students receive a very broad medical education upon which they may build a better understanding both of disease and of life. Yet in spite of the tremendous amounts of money spent for medical education in recent times our schools are now unable to turn out students properly equipped to practice general medicine, much less engage in the practice of the specialties of medicine.

The best that a medical school can hope to do under present conditions is to teach the fundamental and salient features of health and disease clearly and convincingly.

ly. It cannot hope to turn out all students proficient and equipped to practice in all branches of medicine. Primarily, the growth of specialism, both individually and collectively, must rest on a broad foundation of general medical training. However, specialists in medicine cannot be made by our present methods nor by our present medical courses. Special studies and advanced training must be provided for.

To develop scientific effectiveness and clinical knowledge, certain special training is essential. Recognizing this fact, and anticipating the imminent possibility of compulsory regulation, the organized profession has recently been engaged in the establishment of some qualifications. The efforts have resulted in the organization of national examining boards now covering most of the special branches of medicine and surgery.

Although it is true that a license to practice, while conferring the statutory right upon the physician to perform any services embraced within the legal definition of the practice of medicine and surgery, it has not qualified that licensee to act in any other capacity than that of general practitioner, and certainly does not endow him with special knowledge, skill and experience required of the specialist.

A timely editorial appearing in the *Journal of the American Medical Association*, April 1937, entitled, "Liberty or License in Medical Education," truly expresses the honest opinion of the leaders in the medical profession and I am taking the liberty of quoting from this editorial, as follows: "Freedom of action which contravenes the rights of others is no longer liberty. The State owes to its citizens the duty to protect them from ignorance and incompetence masquerading as medical skill. Health and life itself, our most treasured possessions, must be safeguarded, even at the expense of denying by statutory restrictions the freedom of every individual, trained or untrained, to practice medicine and certain other professions. If this is conceded, it follows that the State in the fulfillment of this obligation must satisfy itself beyond a shadow of doubt of the knowledge, skill and character of those whom it endorses and whose ability it guarantees. . . Those who clamor so loudly for Liberty should never forget that in the training of lawyers, dentists and doctors the public has a paramount interest." The medical profession cannot

fail to take notice of the rising tide of criticism against the so-called "self-anointed, insufficiently trained specialists, and the pseudo-specialists."

Left to the course of events, years may pass before this glaring fault in our system of medical education is corrected. Medical policies are extremely conservative. It took seventy years before the American Medical Association won its fight to drive out the proprietary medical schools which all admitted were a blot on education.

Is it asking too much that the safeguards ordained for the protection of people in the thirteenth century be made the law of today? In the thirteenth century, Frederick the Second took notable steps to restrict the practice of surgery in order to safeguard his people. By his regulations, no one was permitted to practice surgery until he had three years of logic, five years in the study of medicine, one year as an apprentice, and, in addition, at least one year of study in such branches of medicine as would qualify him to do surgery. Thus, in the thirteenth century, the laws made it impossible for one not thoroughly trained to practice surgery.

The time has now arrived when the medical schools should grant the graduate a degree of medicine which entitles him to apply to the State Board of Medical Examiners for a license to practice general medicine only. And the law should provide that only those who have had proper training and have properly qualified themselves in a particular specialty can apply for a license to practice that specialty.

I believe that it is the duty of this association to go on record as favoring the divorcement of general medical practice from the practice of a specialty. Such a change in medical licensure is bound to come, forced by poor results obtained in the hands of those with inadequate study, training and experience.

If one is going into a specialty, there are, in my opinion, two ways of doing it: one, is by obtaining an internship in the desired special service either in a general hospital or in a special hospital devoted to this particular field of practice. The other, is to become associated with a master in that field of practice. The best method of preparing for a specialty is to have both these forms of training.

There has been much progress in recent years in graduate training for the specialists, more so since the American Medical Association, the American College of Sur-



geons, the American College of Physicians and such organizations have taken an active interest in this training. Those of us who graduated more than a quarter of a century ago did not have the opportunity to take as much special training as the graduates of today. At that time the American Medical Association did not make the specific recommendations to this effect and other organizations such as the American College of Surgeons were not in existence, to foster such training. Most of us have regretted that such opportunities were not available to us in this country and it was necessary for many to go to Europe for postgraduate training. Today, in America, facilities for postgraduate work are unsurpassed anywhere in the world and are being constantly improved.

It is our duty to take a constructive interest in the cause of healing and rally to the support of a measure that will elevate the standards of those who guard our most precious possession, health.

The basic factor underlying continued confidence in the medical profession is education sufficiently broad in scope to include graduate as well as undergraduate training. Therefore, in developing an adequate educational program every consideration should be given to postgraduate medical education, opportunities for which should be made readily available to the practicing physician through the well organized efforts of medical schools, hospitals and medical societies.

There is no doubt that the wise physician continues to study throughout his entire life. He budgets his time for reading, for the stimulation resulting from medical society meetings, for the investigation of puzzling problems and writing of essays. Unless these four are combined, some side of his professional fullness of life will be neglected and he will restrict his field of usefulness.

The prepared physician joins his county society and regularly attends its meetings. At first, he is instructed, but in time assumes the role of instructor. He goes to his district branch meetings to widen his horizon of medical perspective. By active interest in the state association he takes his logical place as a leader as soon as his skill is demonstrated, which may be by presenting papers, by discussions, by scientific exhibits or participation in postgraduate instruction courses. The state association offers an open forum for the advancement of medical thought.

The successful physician must be taught early in life that in the knowledge of health and sickness is the power to care for the well and cure the sick. He must have an inquiring disposition, a retentive memory, and an inherent and trained ability to use all of his special senses to become a wise counsellor.

Let us reconsecrate ourselves to the cause of medicine and rally to standards of our rules of professional conduct. Upon each and every one rests these obligations. We cannot, we must not falter in either for, if we do, an overwhelming catastrophe will overtake the practice of medicine and the protection it gives the public. Our responsibilities are many, our opportunities numerous and our heritage of medical example too sacred to be denied. I am strong in my faith and firm in my conviction that organized medicine, through the individual, will meet the high professional standards and ethical plane for which I hope and you desire.

Perhaps the most puzzling question a physician ever asks himself is this: What do people expect from a doctor? And that probably suggests another: How do they make their choice when they decide to call a doctor? The great majority of physicians have confessed an inability to get unqualified and uncolored answers to these questions.

The principal reasons for the selection of a particular physician may be grouped as follows: 1. Ability, which consists of economy, willingness, reliability, honesty and quickness; 2. Personality, which secures confidence, warmth of heart and sympathy. Universally, there is a desire to find a doctor in whom perfect trust can be placed.

Some of the elements of success are: Knowledge, the opportunity and ability to serve, grasp and love of one's calling, an adequate financial return, and the gratification that comes from the knowledge of a job well done. As the level of success goes up, the level of failure goes down, as education goes up, inefficiency goes down; as professionalism goes up, commercialism goes down. A professional pride in educational attainment is one of the greatest forces to induce ethical conduct.

The medical ideal is that of a great healer. A great helper of mankind naturally being the ideal, this doctor of medicine is such a combination of the noblest of qualities and the highest degree of skill that no one physician ever quite attains

them all, yet the individual who is not filled with a desire to attain possession within himself all he humanly can of them, is out of place in the medical profession.

A group like yourselves need hardly be reminded of the role of science in the training of a physician. It is not out of place, however, to remind you that all through his life the physician must continue to be "the sober searcher, the cautious striver" as Browning makes his Paracelsus phrase it; that the physician must have a passion for accuracy in thought and action, an insatiable curiosity for new truths and a willingness to test for truth or falsity all conclusions and to judge, without prejudice, the results of this test. In other words, to be "embued" as was Paracelsus, "with comprehension and a steadfast will."

Since disease is protean in form and infinite in the variety of its manifestations, the physician must be keen to observe all things, realizing that cure depends on finding and recognizing the condition to be cured. The good diagnostician uses all his senses and all the aids that science has added to those senses to discover, classify, compare and correctly judge all that bears on the health or sickness of the patients. Those who cannot do this cannot be good physicians and in this connection let me return to the ideal of the medical man and pay tribute to those great teachers and clinicians who have given to their students such worthy examples to follow in the bedside study of disease. And to those practicing physicians who have been willing to share with others, especially the younger men, the wealth of their bedside experience.

Success in the art of healing demands of the physician more than the ordinary understanding of human nature, and a sympathetic appreciation of its weaknesses. There must be an appreciation of all the values of human life and a recognition—nay, a conviction—that in spite of appearances, life is not only good but supremely good and to be both defended and extended. It is these qualities of personality that make much of the basis of the patient's confidence in his physician and this confidence in the physician is the medical man's strongest ally in battling disease.

I should like to urge upon you a serious consideration of ways and means of insuring that the future doctor may not only receive the rudiments of his professional training during preparation for

his practice but that he be inspired to continue his education throughout his life. For some, this would mean a continuation of education along professional and technical lines. For others, problems of socialization of medicine might furnish a basis for interest in something outside of medical work.

The medical profession has always met and will continue to meet the medical demands placed upon it by national emergency or other emergencies. The means by which these new and greater demands can be met are beyond the scope of the individual physician, except in a very limited degree and must, therefore, be devised and put into practice by medical organizations. We look today to the rising generation to provide the leadership and constructive thought which may be instrumental in overcoming many of the besetting problems of medicine of the present day and those which may, and no doubt will, open up in the future.

To our members and guests, we trust that you will find much in this meeting to stimulate your interest and to improve your individual methods. We hope that your contact with various minds and with newer knowledge may bring into sharp relief the rapidity and breadth of medical advances. We hope that you find answers to questions that have puzzled you. And, if you do find increased knowledge of newer methods you will return to give better care to your patients and thus, without going beyond your proper fields, enlarge the scope of your practice through enriched diagnostic and therapeutic methods.

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There are men and classes of men that stand above the common herd; the soldier, the sailor, the shepherd not infrequently, the artist rarely, rarelier still the clergyman, the physician almost as a rule. He is the flower of our civilization and when that stage of man is done with, only to be marvelled at in history he will be thought to have shared but little in the defects of the period and to have most notably exhibited the virtues of the race. Generosity he has, such as is possible only to those who practice an art and never to those who drive a trade: discretion, tested by a hundred secrets; tact, tried in a thousand embarrassments; and what are most important, Herculean cheerfulness and courage. So it is that, he brings air and cheer into the sick room and often enough, though not so often as he desires, brings healing.—Robert Louis Stevenson.



## ORATION IN SURGERY

## CHANGES IN THE SURGICAL TREATMENT OF PEPTIC ULCER

Guy Aud, M. D.

Louisville

Gastric ulcer was recognized as early as 1600 and two cases of duodenal ulcer were recorded in 1817; yet, according to Judd and Waldron (1), no clear-cut distinction was made between them before the beginning of the twentieth century. In 1810 Merrem began experimental work and attempted pylorotomy in dogs to determine the possibilities of gastric surgery.

An important event in the development of the surgical treatment of peptic ulcer was the recognition by Kussmaul of dilatation of the stomach as a result of ulcer and the difficulty of relieving the condition by means other than surgery. The first case reported by him, in 1869, was that of a girl twenty years of age in whom he found a typical example of dilatation of the stomach, produced by stricture of the pylorus due to ulcer. In his work on gastric lavage he says: "Naturally, a cicatricial narrowing which can not be dilated, even to the extent that a goose quill may pass through the pylorus, can never be cured by gastric lavage. Whether in the most daring ages of a distant future an attempt may be made to produce radical results by gastrotomy and to form a gastric fistula and dilatation of the stricture by the knife or sound, no one can today assert. We fear that even the proposal of such a method of relief may expose us to silent or expressed ridicule."

Freidenwald (2) from whom the above quotation is taken, made the interesting speculation that it was possible that these remarks of Kussmaul inspired his friend, the great surgeon Billroth, to attempt to treat certain hitherto incurable forms of gastric diseases by surgical methods. Pean, in 1879, was the first surgeon to perform resection of the pylorus. The patient died after five days. Rydygier, in 1880, performed the second operation, removing a cancer of the pylorus. The patient lived twelve hours.

In 1881 Billroth and Woelfler reported four cases of partial resection of the stomach and pylorus, three of which were performed by Billroth and one by Woelfler. This procedure later became known as

the Billroth I operation. In this operation a portion of the stomach including the pylorus is removed and an anastomosis made between the duodenum and the stomach.

The Billroth I type of gastric resection is the most logical and obvious and naturally, was the first to be devised. While it may be found wanting in many respects it, nevertheless, has advantages that strongly recommend its use in certain selected cases. Following the first successful use of this operation by Billroth, and later by others, it underwent many modifications such as those suggested by Schoemaker, Haberer, C. H. Mayo and others. The limitations of the Billroth I type of gastric resection were quickly recognized by Billroth himself and he very soon devised the procedure in which the severed ends of the duodenum and the stomach were closed and an anastomosis was made between the stomach and the jejunum, known as the Billroth II operation.

At present the Billroth I operation is employed only rarely and then when pylorotomy alone is done. It has been supplanted by Polya's modification of the Billroth II operation in which the jejunum is anastomosed to the end of the stomach. The operation as devised by Polya, in 1911, has proven eminently satisfactory and continues to gain in popularity. In 1917 Balfour modified the Polya operation by employing a long loop antecolic end to side anastomosis which possesses a distinct advantage over the Polya procedure in certain cases of high gastric resection, in total gastrectomy and in those cases in which lack of mobility of the transverse mesocolon precludes a posterior short loop anastomosis between the stomach and the jejunum.

Broadly speaking, the operations that may be performed for peptic ulcer fall into two main groups: The conservative group which includes local excision, infolding, pyloroplasty, gastro-enterostomy, etc., and the radical group which comprises the various types of subtotal gastric resection.

Previous to 1900 the surgical treatment of chronic gastric and duodenal ulcers was confined largely to gastrojejunostomy and pyloroplasty for the relief of obstruction, and usually afforded satisfactory relief with a relatively low mortality.

The one point in the treatment of peptic ulcer upon which there seems to be almost universal agreement is that all uncompli-

cated acute gastric and duodenal ulcers belong primarily in the domain of internal medicine. Haberer (3) believes simple acute gastric and duodenal ulcers should be treated medically and only those cases of ulcer that have developed complications such as perforation, hemorrhage or malignant degeneration should be subjected to surgery. Cutler (4) reported a series of 262 cases of chronic ulcers of the stomach and duodenum operated upon at the Roosevelt Hospital. He feels that surgery is indicated only in cases where medical treatment has failed or where complications have resulted. The records of the medical service show that 170 of 192 cases, or 88 per cent, of primary peptic ulcers admitted during the five years reported on were discharged symptom-free. Rankin and Johnson (5) state that peptic ulcer is primarily a medical responsibility and that surgery is indicated only in cases in which complications occur during the course of the disease.

Because of the high per cent of satisfactory results following medical management of the acute, uncomplicated cases of peptic ulcer, particularly those of the duodenum, surgery is rarely if ever advisable. Many of these ulcers remain permanently healed and others are entirely free of symptoms over a long period of time.

Gastro-enterostomy was proposed by Nicoladoni in 1880, but it remained for Woelfler to employ the operation in an advanced case of carcinoma of the pylorus, and to give the operation its name. Gastro-enterostomy by the posterior or retrocolic approach was devised by Courvoisier in 1883.

No doubt this operation retained its popularity largely because of its relative simplicity, the low mortality accompanying its use, the comparatively high per cent of satisfactory primary results and also because of the fact that it can be successfully employed by surgeons who are not sufficiently experienced in performing the more radical operation of gastric resection. While gastro-enterostomy is rapidly being supplanted by gastric resection for the cure of chronic peptic ulcer it is still indicated in certain obstructing duodenal ulcers in patients past middle life in which there is a low gastric acidity and also in cases where gastric resection is not advisable.

The good results following gastro-enterostomy are frequently in proportion to the degree of obstruction present as a result of the ulcer. That the results are propor-

tionately as bad in cases in which gastro-enterostomy is done in the absence of an ulcer is clearly shown in a report by W. J. Mayo (6) of three hundred and seventy-nine cases of gastric and duodenal ulcer operated upon, in 64 of which no ulcer was actually demonstrated at the time of operation. Eleven or 17 per cent of this group required supplementary operations at a later date. Of the fifty cases heard from only 34 per cent were cured; whereas, in the three hundred and eighteen cases of actually demonstrated ulcer, two hundred and thirty-four were traced and 80.7 per cent were cured.

That gastro-enterostomy does not prevent such complications as hemorrhage, perforation, jejunal ulcer or malignant degeneration in gastric ulcer is universally recognized. The operative mortality in gastro-enterostomy should not exceed 2 to 3 per cent.

Many different kinds of plastic operations upon the pylorus have been devised, some of which include excision of the ulcer while others do not. The Heinecki-Miculicz pyloroplasty was devised by both Heinecki and Miculicz independently of each other. Heinecki's operation was first reported in 1886 and Miculicz reported his operation in 1887. Gastroduodenostomy was first performed by Jaboulay in 1892. Finney's pyloroplasty was described by him in 1902.

Horsley, in 1919, modified the Heinecki-Miculicz procedure so as to enable excision of the ulcer, with closure in the transverse direction. Judd (7) felt that an essential part of such an operation included removal of the ulcer and a large part of the anterior portion of the sphincter muscle, followed by an anastomosis of the stomach to the duodenum. This is in accord with the present belief that the gastric acidity is greatly reduced by adequate regurgitation of the alkaline duodenal contents into the stomach.

So many conditions and circumstances must be taken into consideration in selecting the best operative procedure in each particular case that no one operation is or could be suitable for the treatment of all cases of gastric or duodenal ulcer. There has been wide divergence of opinion in the selection of a suitable operation and until the past few years the tendency has been very strong toward the more conservative procedures. Most surgeons were content with the 80 to 85 per cent of satisfactory immediate results, together with the low mortality rate, following gastro-enteros-



tomy; forgetting or ignoring the poor late results, and the high mortality rate of secondary operations for the relief of recurrences and complications. It is likely that the conservatism of this group was encouraged by the formerly high mortality of from 7 to 15 per cent in partial gastric resection. The mortality is now only 2 to 10 per cent, some surgeons reporting large numbers of consecutive cases without a death. The low mortality and the high per cent of permanent cures are proving powerful factors in converting surgeons to the more radical treatment of chronic gastric and duodenal ulcers by partial gastric resection. This operation in chronic ulcers, in ulcers with high gastric acidity and particularly in those with complications, permits extirpation of the ulcer and removal of the most actively acid secreting portion of the stomach. It is followed by the fewest jejunal ulcers and eliminates the possibility of malignant degeneration in gastric ulcer.

Lewis and Lemon (8) report two hundred and twelve Polya type gastric resections for duodenal ulcer with a mortality of 1.9 per cent. Follow-up information showed 83.5 per cent were well, and 14 per cent required some restriction of diet and activity in order to remain well, making a total of 97.5 per cent of satisfactory results. Haberer (1927) reports up to 95 per cent permanent cures.

The poor results following the treatment of gastric ulcer by gastro-enterostomy alone are clearly shown in the report of Church and Hinton (9) from the Bellevue Hospital and Balfour (10) from the Mayo Clinic. From the Bellevue Hospital the report showed 22 per cent cured and an additional 22 per cent benefited, making a total of 44 per cent improved while from the Mayo Clinic 50 per cent were reported as relieved with partial relief in an additional 29 per cent of cases. Further reason for failure to obtain relief following gastro-enterostomy is shown in a series of 1,475 cases of gastric ulcer reported by Judd and Proctor (11) in which there were multiple ulcers of the stomach in 6 per cent and an associated duodenal ulcer in 16.5 per cent.

The following statement from a report by Judd and Waldron in 1934 shows the position taken by most surgeons at that time regarding the treatment of peptic ulcer: "The trend of surgery at the Clinic for acute and chronic duodenal ulcer and duodenitis is apparent. Of 2,303 patients

receiving attention for these conditions in the past five years 1,475 underwent gastrojejunostomy and 663 local operations. Less than 5 per cent were subjected to the radical procedure of partial gastrectomy. This indicates the attempt that is being made to maintain normal physiological conditions and to avoid extensive resection which many times turns out to be unsatisfactory in the end." In a report by Cutler in 1938, from Roosevelt Hospital, he states: "Gastro-enterostomy combined with local ulcer excision or cauterization gave the best early results in the smaller and simpler ulcerations." During the past few years the trend has been reversed and is definitely toward the use of more and more radical surgical procedures for the relief of these conditions.

The frequency with which gastrojejunal or jejunal ulcer develops following various surgical procedures for the cure of gastric and duodenal ulcer can not be correctly estimated. Reports of such occurrences vary from 2 to 40 per cent, with most surgeons agreeing that a fair estimate at the present time would be from 2 to 5 per cent, depending upon the type of operation performed and the degree of anacidity resulting. Haberer (1927) states that a peptic jejunal ulcer has never been observed following a Billroth I operation. In a series of two hundred and twelve patients in which a Polya type gastric resection was done for duodenal ulcer, he reports 2.5 per cent experienced symptoms of anastomotic jejunal ulcer. Following gastrojejunostomy for duodenal ulcer Balfour (1930) reports the development of gastrojejunal or jejunal ulcer in 3.2 per cent of the cases in a period of ten years or more after operation. Judd and Waldron (1934) reported 628 patients operated upon for jejunal ulcer. In 609 of these patients it was a sequel to gastro-enterostomy for duodenal ulcer. In nineteen cases jejunal ulcer followed gastro-enterostomy for gastric ulcer. In seven cases gastric and duodenal ulcer were present. The rapidity with which gastrojejunal ulcer may develop and the enormous size they may attain is shown in a case recently reported by Lahey (12). Seven weeks following a subtotal gastrectomy of the antecolic Hofmeister type, in which very little of the stomach was left, severe bleeding which could not be controlled, recurred. At operation the entire anastomosis and the greater portion of the remainder of the stomach were involved in a large jejunal

ulcer the size of one's palm and eroding so that its bed involved the pancreas. This patient was relieved by a second partial gastrectomy.

Walters (13) says that following pyloroplasty, or even gastric resection of the Billroth I type, in which the stomach is joined to the duodenum, the percentage of patients who have relative acholydria is not as great as when anastomosis is made between the jejunum and the stomach. This is probably due to the lack of reflux of duodenal secretion into the stomach because following the Billroth I operation, pyloroplasty or gastroduodenostomy, the natural peristalsis carries the secretion onward. In contrast, following gastrojejunal anastomosis the peristaltic force carries jejunal secretion into the stomach. Lewis and Lemon (140) believe the chief advantage of partial gastrectomy over gastro-enterostomy is that there is a greater lowering of gastric acidity in a higher percentage of cases after the operation. An anacidity developed in 63 to 80 per cent of two hundred and twelve patients in which a Polya type gastric resection for duodenal ulcer was done. The removal of the greater portion of the acid secreting mucosa of the stomach together with elimination of the secretogenic effect of the prepyloric mucosa, constitute the chief factors in lowering the gastric acidity.

Balfour (130) found no case in any series of cases studied where perforation of the duodenal ulcer occurred after gastro-enterostomy had been performed. In 1919 he (14) felt that hemorrhage following operation, for both gastric and duodenal ulcer was of sufficient frequency (2 per cent in duodenal and 1 per cent in gastric ulcer) to warrant a revision of operative methods in such cases. Gastro-enterostomy alone did not always protect against further hemorrhage but when combined with excision or cautery of the ulcer almost total protection was afforded.

The wide variation in the end results of the medical treatment of hemorrhage due to peptic ulcer is noted by Edye (15) who quotes Hurst and Ryle as having a mortality of 4.8 per cent, Gordon and Taylor, of the Middlessex Hospital, 21 per cent and Meulengracht, of Copenhagen, with his "harvest-hand" diet, a mortality of 1 per cent in five hundred and twenty-one cases. Because of the high mortality and frequent recurrences of bleeding following the medical management of hemorrhage from gastric and duodenal ulcers, partial gastric

resection which includes the bleeding ulcer affords complete protection from further hemorrhage and is the operation of choice.

#### CONCLUSIONS

The surgical treatment of peptic ulcer began in 1869 with the development by Billroth of his operation of pylorotomy and, until the beginning of the present century, was confined largely to the relief of pyloric obstruction. Gastro-enterostomy, from 1881 until recently, was by far the most popular and successful surgical procedure for the treatment of gastric and duodenal ulcers, and remains the operation of choice whenever partial gastric resection is not advisable. Certain types of pyloroplasty, both with and without removal of the ulcer, may be used with success in selected cases.

Gastric resection for peptic ulcer was rarely done before the introduction by Polya, in 1911, of his operation in which the resected end of the stomach is anastomosed to the side of the jejunum. This operation is rapidly supplanting other procedures in the surgical treatment of gastric and duodenal ulcers and, judging from its present popularity, will continue to be the operation of choice for some time to come.

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## ORATION IN MEDICINE

## THE EPILEPSIES

THORNTON SCOTT, M. D.

Lexington

Until very recent years epilepsy has been a stepchild of medicine. The attitude of the public has been one of hopelessness and horror, fed and grown fat on numerous misconceptions and primitive superstitions. The attitude of the medical profession has been one of hopelessness and consequent indifference. The result has been that many patients succumb to patent medicine advertisements and are never seen by a physician. In the past five years however the number of publications on the subject annually has increased markedly. I shall endeavor to point out the several reasons for such a revival of interest in this ancient and fascinating symptom complex. As my title I have chosen "The Epilepsies" to imply the many sided nature of the convulsive disorders both as to cause and manifestations.

Let us first consider the importance of the epilepsies to the community at large. According to Lennox there are probably 50,000 epileptic patients in mental hospitals and in special colonies. Less than 10% of patients with seizures are so confined. In the draft of 1917, one man in 200 was rejected on account of epilepsy. Probably many more had symptoms not recognizable at the time as epileptic in nature. This means that more than 500,000 persons in the United States are or have been subject to seizures. It is estimated that the annual cost of epilepsy to the public is at least \$100,000,000. In spite of the huge cost of the illness not only in money but in work and human happiness, very little money has been set aside for the investigation of the convulsive disorders, not more than \$50,000 each year.

How can society attack this problem? The first requisite is, of course, enlightenment. Without knowledge and understanding the lay mind falls an easy prey to superstition and prejudice. Without facts and therapeutic implements the medical mind falls into the same error and thereby sinks into indifference. Without a means of controlling his seizures the patient falls into a state of mind characterized by despair, anxiety and psychic isolation. Hours of psychotherapy and psycho-

analysis will utterly fail to improve this state of affairs in a patient whose seizures are unrelieved.

On the public front, the Laymen's League Against Epilepsy, with offices at 25 Shattuck Street in Boston, has been organized to disseminate useful knowledge about seizures. Dues are small and the proceeds are spent on research and educational bulletins. Patients and others who are interested may join.

On the medical front, recent discoveries have resulted in the revival of interest previously mentioned. The most important of these have been electroencephalography on the investigative and diagnostic side and the introduction of a new and better anti-convulsant drug on the therapeutic side. Much needed courage has been given to those afflicted, not only by improved means of controlling seizures but, in general, by this revival of interest on the part of the profession.

There is room for considerable improvement in our present day care of such patients. Most of the care and money now are spent on the neurological wrecks who would be beyond repair even if they did not have seizures. These could be spent to better effect on patients for whom there is some hope and who could, under proper care, become productive members of society.

It has been well established that epilepsy is not a disease in itself but a symptom of some underlying physiologic disorder in the central nervous system. Like cough seizures may be set off by any one of many unrelated pathologic processes. In view of quite recent data the majority of seizures seem to originate from the combination of one of many inciting factors with an hereditary predisposition. It will serve our purpose to speak of the "epileptic equation." On the one side we have seizures as a result. On the other side are predisposition, inciting causes such as metabolic disorders or epileptogenic foci in the form of organic brain lesions, plus factors which raise or lower the seizure threshold. Sufficient increase or decrease of any of these factors may result in the presence or absence of seizures.

Loss or alteration of consciousness is a *sine qua non* for all types of seizures. The most dramatic, of course, is the grand mal attack, well known alike to layman and physician, with complete loss of consciousness and a wide variety of motor, vasomotor and visceromotor manifestations. This is

sometimes preceded by premonitory symptoms or auras. Aurae frequently occur without consequent seizures and may consist of queer sensations in various parts of the body, dizziness, ringing in the ears, the hearing of strange noises or the smelling of strange odors. Much more frequent but less conspicuous are the attacks of petit mal which consist of lapses of consciousness lasting several seconds or less. Many of these pass unnoticed by the patient or the physician. Often they are described by the patient as dizzy spells or "absences."

Less well recognized are the psychomotor equivalents or psychic variants of epilepsy. These attacks result in alterations of consciousness without complete loss. They may take many forms, from momentary swallowing motions or smacking of the lips to confusional states and automatisms lasting for hours or days. Occasionally these are associated with criminal acts, often with amnesia for the attack. Within this category probably fall many outbursts of rage, temper tantrums and phases of periodic dullness such as were recently reported by Putnam and Merritt. In the past it was possible to recognize these as definite epileptic manifestations only when they occurred in known epileptics. With newer methods of investigation it is possible to determine their epileptic nature even in the absence of such classic phenomena as grand and petit mal.

It is evident, therefore, that all areas of the brain may take part in seizures either singly or in concert; motor or sensory; visual, auditory or olfactory; intellectual or emotional; vasomotor or visceromotor.

The site of origin of seizures has been the subject of much speculation. There is some opinion to the effect that the fault may lie in the hypothalamus, that beautiful isle of neuropsychiatric somewhere. Anatomic studies have been of little help. Many of the lesions are merely associated with or a result of epilepsy. The most constant changes, as described by Spielmeier, are in Ammon's horn, a part of the brain most sensitive to anoxia on account of its delicate blood supply. Cortical scars and focal microgyria, emphasized and operated upon by Penfield, probably represent "trigger zones" which may initiate seizures in susceptible individuals. Suffice it to say, there are no constant lesions found in uncomplicated, so-called idio-

pathic epilepsy which are peculiar to the disorder.

Many studies of a physiologic and biochemical nature have been carried out. I shall not discuss them here except to say that conditions tending to produce alkalosis and retention of body water appear to lower the seizure threshold. Certain drugs, ketosis, acidosis and dehydration, tend to raise it. Attacks seem most prone to occur in the transition state from and into the normal unconsciousness of sleep. Hypoglycemic episodes such as occur with insular adenomas of the pancreas or are induced by the administration of insulin may lead to convulsive seizures in certain individuals. Electric and pharmacologic shocks are well known means of inducing seizures artificially.

The morbid psychology of epilepsy has furnished much discussion in the past. Some have gone so far as to describe an epileptic personality with egoism, stubbornness and mental isolation as its characteristic features. These traits are probably most often the result of an affliction stigmatized by society. It is easy to understand why epilepsy should tend to produce its psychic compensations, a certain withdrawal from human contacts and consequent mental isolation. Nevertheless, it is also true that epileptics who have been skillfully handled from a psychiatric point of view do not show a preponderance of these peculiarities. The therapeutic implications of this are obvious.

Mental deterioration has long been associated with epilepsy in the public and medical mind. The incidence of this has probably been exaggerated and its significance somewhat distorted. Many epileptics are idiots, imbeciles and morons, or, to put it more accurately, many patients are idiotic and epileptic for the same reasons, such as congenital malformations of brain, birth injuries and brain destruction from various other causes. The large majority of non-institutionalized epileptics presents quite a different picture from the hopeless wrecks found in mental hospitals. It is believed in reliable quarters that epilepsy per se does not of necessity result in loss of intellect and that it is not incompatible with high intelligence, even genius. Another fact must be borne in mind. The occurrence of frequent subclinical seizures whether petit mal or psychomotor, may, in some cases, obscure an



intellect which would be found normal were the seizures under control.

Since ancient times the factor of heredity has been assumed. It is surprising to find on analysis how low the incidence of outspoken epilepsy is in the families of non-institutionalized epileptics, only 2.4% in 13,262 parents, siblings and children of 2,130 patients studied by Lennox. This is five times the incidence of seizures in the general population, however. Contrast this with the incidence of migraine in families which is nearer 60%. The incidence of migraine in the families of epileptics was twice that found in a normal group. Families tend to conceal the occurrence of fits in the family tree and usually prefer to attribute them, when they appear in offspring, to some antecedent trauma, infectious disease, intestinal worms or the state of the moon, rather than to a trait they themselves may have transmitted. An hereditary and familial predisposition to fits could be surmised but not definitely demonstrated prior to the discovery of electroencephalography.

Only so recently as 1929, Hans Berger was the first to report that action potentials of the brain could be led off through the intact skull, amplified and recorded graphically in a manner analogous to electrocardiography. This method has since been used extensively by Jasper in Montreal, particularly in the localization of brain tumors, and by the Gibbs and Lennox of Boston in the study of epilepsy, especially. These latter workers have found that the three main types of seizures result in three fairly distinct types of disturbance of the brain waves. Petit mal attacks seem to be associated with slow waves of high voltage alternating with high voltage spikes. Psychomotor seizures seem to be associated with slow flat topped waves, often with superimposed normal rhythm. Grand mal attacks show rapid waves of high amplitude. It is of considerable clinical interest that these abnormal waves can sometimes be found even when the patient is not having an attack and they can often be induced by hyperventilation. The detection of sub-clinical seizures has thereby been facilitated and it has been possible in some instances to predict grand mal episodes in advance by noting an increase in frequency and amplitude of the characteristic waves. Electroencephalographic studies have led the Boston workers to designate epilepsy as a paroxysmal cerebral dysrhythmia, to

determine the occurrence and incidence of this dysrhythmia in non-epileptic near relatives of patients and to postulate that this dysrhythmia may be transmitted as a dominant hereditary trait. Jasper prefers the term paroxysmal "hypersynchronie," considering the disorder one of amplitude rather than of rhythm. In fact there are several points of controversy between the two schools of thought which I shall not attempt to unravel here.

By electroencephalographic means, hereditary factors can be established fairly definitely. In 262 near relatives of 140 patients, 53% of the relatives had abnormal records. In 27% of 78 families in which both parents were examined, both parents had abnormal tracings. Dysrhythmia occurred as often in relatives of patients with so-called symptomatic epilepsy as with the "essential" variety. Persons with predisposition outnumber epileptics 20 to 1, constituting approximately 10% of the population. The eugenic implication of these data are almost self-evident. The offspring of two non-epileptic persons with abnormal brain waves would be in all probability, just as liable to seizures as the offspring of an epileptic and a person with normal waves. The observation that all subjects with dysrhythmia do not have epilepsy brings us back to the consideration of such factors as threshold and conditions which lower threshold such as cortical scars, focal microgyria, trauma, brain tumors, hypoglycemia and possibly other metabolic disturbances. I understand Lennox to believe that the epileptic predisposition is present as cerebral dysrhythmia and that such lesions act as "trigger zones" or initiating foci for seizures. Patients with brain tumor who have seizures seem to show a higher family incidence of dysrhythmia than the general population. Patients with identical tumors in the same location as tumor patients with seizures may have no seizures in the course of the disease.

The electroencephalograph, therefore, is useful in detecting subclinical attacks and, in combination with history and other examinations, in ruling out hysteria and malingering. It is also useful in tracing hereditary factors. Outbursts of abnormal waves constantly arising from a single focus in the cortex may point the way to exploratory craniotomy. It may, in addition, prove of use in evaluating response to various methods of treatment. The vistas opened up by this means of ap-

proach are immense and formidable and only the groundwork has been started. This method of examination is still in the more or less experimental and investigative stages and is not widely used at the present time. There are relatively few such machines in the country and the interpretation of records requires considerable experience and judgment.

Another very important advance in the field of epilepsy has been along therapeutic lines. In 1937 Merritt and Putnam used measured electric currents passed through the intact cranium to produce convulsions in animals. In this way drugs could be tested for their anti-convulsant action. Their object was to find a drug with the least hypnotic effect and the greatest anti-convulsant action as these effects are known not to be interdependent. They found that diphenyl sodium hydantoinate was most effective in inhibiting the convulsions so induced. Since that time it has been marketed under the name dilantin sodium and has been widely used clinically. This drug has been found to be particularly effective in controlling psychomotor seizures which are extremely refractory to phenobarbital and the bromides. It was also found to be superior to phenobarbital in inhibiting grand mal. It is somewhat effective in petit mal but less so than the preceding types. No drug has been found which controls petit mal satisfactorily.

Dilantin is not without occasional undesirable side effects among which are, ataxia, skin rashes; marked hyperplasia of the gums (more marked in children), gastric irritation and, in some instances, psychosis. Patients should be under careful supervision while taking the drug and dosage should be adequate. It should never be discontinued abruptly as status epilepticus may ensue. The average dose is 0.1 gm. three to four times daily with meals. Occasionally doses of 0.5 to 0.6 gm. daily may have to be given. If necessary it may be combined with phenobarbital 0.1 to 0.2 gm. given at suppertime. Many physicians are inclined to forget the long acting properties of phenobarbital and prescribe it at bedtime with resultant hangover the next morning. All sorts of combinations of the older and newer anti-convulsant drugs should be tried until optimum control of seizures is obtained. The advantages of dilantin by far outweigh any disadvantages. The adequate control of clinical and sub-clinical seizures may result in improve-

ment of behavior, intelligence and general outlook. In many cases the restoration of a feeling of well being has been striking. Work is now going on with the object of obtaining even more effective anti-convulsant drugs with fewer toxic effects. The method of Merritt and Putnam has furnished an excellent and easy means of assay of these effects. Nevertheless, clinical trial on patients under controlled conditions is necessary before any new drug can be distributed for general use. This, of course, takes much time and effort but given adequate support for research, discovery of drugs which will control petit mal as well as grand mal and psychomotor seizures, may reasonably be expected.

The ketogenic diet has not been discussed here as it is of little or no value in the treatment of adults and requires rigid adherence to an abnormal and rather disagreeable diet over a long period of time; twelve to eighteen months or more. Acetonuria must be maintained constantly and the urine must be tested daily for the presence of ketone bodies. This regime is of some value in the treatment of seizures in children and in conjunction with dilantin may be useful in inhibiting their attacks of petit mal where anti-convulsant drugs alone have failed.

Those interested in this method should consult the book entitled "The Treatment of Epilepsy" by Dr. Fritz M. Talbot in which a detailed technique for the ketogenic treatment is outlined.

The availability of a useful drug should not in any way cause one to relax one's efforts at rehabilitation of the epileptic. In fact, it is practically a necessity in any such program. The psycho-social readjustment of the epileptic is of the utmost importance. He should be encouraged to lead a normal and useful life. By no means should he be allowed to rely on his affliction as an excuse for shirking work or other responsibilities. Attacks are prone to occur more frequently when the patient is idle or worried and a vicious cycle can easily result. Attention and mental activity have a definite antagonistic effect against seizures. Excessive fatigue, however, is not desirable. Again I should like to emphasize that the first step in psychotherapy of the epileptic must consist of adequate control of seizures. Without such control it is impossible for the patient to attain confidence in himself and to rid himself of the terrible anxiety that he may have a fit at any time. This anxiety is quite com-



mon and may come to constitute almost as much a problem as the seizures themselves. One should attempt to get the epileptic out of the bosom of his family for in the direction of dependence and inactivity lies deterioration, as even for the non-epileptic. One should not stop with the treatment of the patient. The family and friends often need treatment and education as well. They should be encouraged to develop an attitude of sympathy and understanding devoid of mawkishness or oversolicitude. They should be taught what to do in case of an attack and how to do it most efficiently with a minimum of fuss and emotion. It is remarkable what can be done, given a family with sufficient tact and intelligence, towards changing the whole aspect of existence for the epileptic.

I should like to cite a few cases very briefly to illustrate various types of seizures and the effects of medication.

A man of 40 had suffered for two or three years from recurrent "dizzy spells" and had been examined at length elsewhere, physically and roentgenologically, with negative results. On detailed questioning it was found that his spells consisted of momentary blankness, that he was frequently unable to call objects by name and occasionally became confused as to where he was. He had a very responsible and highly technical position on a railroad and was being handicapped in his work. The attacks, which at first had come only once every month or so, had recently occurred almost daily. He had gradually become as incapacitated by constant fear of attacks as by the actual seizures. His wife could always tell when he was having an attack and stated that for a year or so after they were married, seventeen years before, he had had similar episodes which he himself had not noticed. Physical, neurological and laboratory examinations were negative. A lumbar puncture showed no abnormality. He was placed on dilantin sodium 0.1 gm. three times a day with meals. He immediately ceased having attacks and remained free for over a year while taking the drug. This summer while on vacation he left off the drug because he was feeling so well. Shortly after this he had an episode of unconsciousness lasting half an hour. In this case the use of dilantin was of diagnostic as well as therapeutic assistance.

An athletic married man of 26 suddenly cried out in a store that he was going

blind. He was caught by a friend and kept from falling whereupon he thrashed about wildly and was quite delirious. He was taken to a hospital where he remained for a week with fever and a fumbling aimless delirium. Lumbar puncture at that time was said to have been negative. At the end of a week he had recovered sufficiently to be allowed to go home but his memory remained faulty and he was unable to call friends by their correct names, mistook strangers for old acquaintances and could not add simple sums correctly. Three weeks after the initial episode he fell at home in the bathroom. His wife does know whether he had any convulsive movements or not. He again went immediately into a state of confusion and delirium, struggled aimlessly when restrained in bed. He again had fever without evidence of systemic disease. Again lumbar puncture was negative in every respect. In four or five days he was sent elsewhere and was seen by a neurologist who, following negative air studies, made a diagnosis of psychosis. Following pneumoencephalography he improved somewhat and returned here. On the supposition that these episodes might represent prolonged post-convulsive confusional state or severe prolonged psychomotor attacks he was placed on dilantin 0.1 gm. three times a day. His mental status returned to normal immediately and in a year he has had no recurrence. Electroencephalographic studies would have been very helpful in this case in showing the epileptic nature of his trouble at the outset and in showing what type of attack he was having.

A boy of five had one convulsion in infancy attributed by his family, to teething. For the past year or so he had been having frequent episodes of inattentiveness. Deterioration of his intelligence had been noted and at the time he was first seen he could not count to ten. At least once during each visit he would have an episode in which his gaze would become fixed, he would make a few shrugging movements of his shoulders and could not respond to questions. He did not respond to dilantin in doses as high as 0.1 gm. three times a day and to phenobarbital in addition. Air studies were done elsewhere with negative results. These were undoubtedly petit mal attacks and, as is often the case, were resistant to the usual anti-convulsant drugs. He might have responded to a ketogenic diet in addition to drugs but has not returned for

further treatment to date.

A man of 28 began to have grand mal seizures eight months before his first visit to the out-patient clinic. A lumbar puncture and air studies had been done previously with negative results. When first seen he was taking dilantin and phenobarbital without adequate control of his seizures. He had also developed weakness of the right lower face and the right arm. He was sent for further air studies which were done about three months after the first and showed a lesion in the left frontal lobe. A craniotomy was performed and an inoperable infiltrating tumor, a glioblastoma multiforme was found. He died two months after operation. In this case definite localizing signs appeared though other studies had failed to point to a localized lesion. He responded poorly to anti-convulsant drugs, though this is not always the case. Electroencephalography might have pointed to a localized lesion earlier but the tumor had doubtless been inoperable from the start.

A single girl of 21 began to have convulsive seizures at the age of 13. These caused her to withdraw from school, indeed from most contacts outside her own family. She would have a grand mal attack at least every two weeks with an aura of drawing substernal and interscapular pain. About the time of her periods she would have severe attacks of migraine with vomiting. In addition, at irregular intervals she would experience sudden outbursts of unexplainable rage and episodes of crying. She had a tendency to drop things for no reason she could think of and her mind would frequently "go blank." She was very shy and sensitive about her disorder and on account of it had become unhappy and antisocial. She was placed on dilantin sodium, 0.1 gm. four times daily and in a year and a half has had only one convulsive seizure and this occurred at a time of extreme emotional stress. An attempt has been made to make her realize that she is no different from anyone else as long as her seizures are under control. Indeed it would have been impossible to convince her of it had they not been controlled. She has been encouraged to develop interests in the community outside her family. The results of these combined measures have been most gratifying. During this year and a half she has seemed to be an entirely different person, in facial expression, in her dress, in vivacity and, apparently, in general intelligence. She

has reported that her headaches seem to have disappeared also.

This case illustrates the multiplicity of symptoms which may arise in an epileptic and the many sided nature of the problem, the solution of which is facilitated by adequate control of non-convulsive as well as convulsive seizures.

It should be emphasized that every patient with epilepsy should have complete history, complete physical and neurological examinations. Since the disorder constitutes a symptom complex rather than a disease every attempt should be made to determine the nature of the underlying cause or causes so that they may be corrected if possible. Lumbar puncture should be done routinely with accurate determination of the spinal fluid pressure, dynamics, cell count, total protein content, Wassermann and colloidal gold tests. Serological tests for syphilis should be carried out on the blood as well. Blood sugar determination and tolerance curves should be made whenever the possibility of hypoglycemic attacks is suspected. Air encephalography or ventriculography should be carried out, in most cases, only when brain tumor cannot be excluded by other means.

In summary I should like to emphasize the following points. The electroencephalograph has proved to be of considerable value in the study of epilepsy in clarifying the nature of the disorder as an electrochemical disturbance; in the diagnosis of doubtful cases; in pointing a possible relation to certain behavior problems and in tracing the hereditary and familial occurrence of dysrhythmia with all its possible eugenic implications.

In treatment, psychotherapy is of the utmost importance in rehabilitating the victims of a disorder which so readily leads to psycho-social maladjustment. Control of seizures is of greatest assistance in psychotherapy. Dilantin sodium, a recent anti-convulsant drug with little or no hypnotic effect is a most important addition to our armamentarium. By inhibiting non-convulsive as well as convulsive epileptic manifestations it is a most useful adjunct to psychotherapy.

One should bear in mind that an epileptic with an otherwise normal brain, relieved of attacks and the fear of attacks, can function as usefully and normally in our society as any non-epileptic with comparable endowments.



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## ORIGINAL ARTICLES

## NEWER APPLICATIONS OF PERITONEOSCOPY AND A NEW INSTRUMENT TO AID THE PROCEDURE

JOSEPH E. HAMILTON, M. D.  
Louisville

"Peritoneoscopy," the procedure of visualizing the abdominal viscera by means of an optical instrument, was first performed by Kelling (1) of Dresden, in 1901. In this country it has been brought to its present usefulness by Ruddock (2,3) who, in 1934, introduced the instrument now in general use. My experience with peritoneoscopy dates from December, 1938, since which time I have performed 120 examinations. This evening, I wish to point out to you the possibilities of this procedure in abdominal diagnosis and to emphasize some newer uses to which we have put it. Finally, I want to describe an instrument I have devised to assist the procedure.

**INSTRUMENT AND TECHNIQUE:** The Ruddock peritoneoscope and accessories are shown in the slide. After local novocain infiltration, a small stab wound is made down the transversalis fascia at any spot chosen, but usually in the midline, just below the umbilicus.

While the patient tenses his abdominal wall, a large blunt needle is cautiously pushed into the peritoneal cavity and through it the abdomen is moderately distended with air.

Next, the peritoneoscope sheath and trocar tip are inserted through the tensed abdominal wall. If ascites is present, the trocar is replaced with the special suction tip and the fluid aspirated. This done, the suction device is removed and the observation telescope is now locked into the sheath, the abdomen re-inflated with air and the examination made. If a biopsy is desired, it is taken through the same sheath with the biopsy forceps which carries a small observation telescope. By diathermy the biopsy site is cauterized without, at the same time, coagulating the specimen. At the conclusion of the examination, the air is let out, the sheath withdrawn and the puncture wound closed with a single suture.

Peritoneoscopy, if done carefully, is of almost negligible danger to the patient and constitutes a minimal surgical procedure. I have only once perforated bowel and this was in a far advanced case of tuberculous peritonitis with adhesions. Surprising as it may seem, considering the pneumoperitoneum produced, very few patients complain bitterly and supplementary anesthesia has been necessary but once in this series. As a rule, the patient may be up and about 8 hours after the examination, or the following day, if a biopsy has been taken.

**WHAT CAN BE SEEN:** Through the peritoneoscope, the examiner can clearly see nearly all but the bare area of the liver, the gall bladder and, in the female, much of the uterus and adnexae. The normal spleen and the appendix are only occasionally seen. The anterior wall of the stomach, much of the colon and small gut, as well as the omentum and parietal peritoneum, can be visualized. The field of vision can often be increased by tilting the patient in various positions or by having an assistant insert a finger into the rectum or vagina.

**DESCRIPTION OF THE NEW INSTRUMENT:** In September, 1940, I devised a simple instrument to assist in peritoneoscopy. It consists (Fig. 1) of a small paracentesis trocar and sheath (4 1-2 mm. in diameter) and 2 accessories, a blunt manipulating or retracting rod and an insulated endothermy electrode, both of which can be passed through the sheath through an airtight rubber cap. With the peritoneoscope already in place, the trocar and sheath are pushed through a tiny stab wound about three inches away. This step, guided through the peritoneoscope, is thus free of danger. Once the sheath is in place, the

trocar is removed and the rod or the diathermy knife is inserted.

This instrument was presented, both in an exhibit and in a moving picture at the meeting of the Southern Medical Association in Louisville, Nov. 15, 1940. The diathermy electrode was added 3 or 4 months later. Two other authors in recent publications have independently described instruments auxiliary to peritoneoscopy. Robinson & Fisk (4) use an instrument similar in principle to my own, and Lamb (5) described a transparent bladder that can be inflated around the peritoneoscope, thus pushing viscera aside.

By manipulating the rod, the range of vision of the peritoneoscope is greatly increased; loops of bowel or omental adhesions that usually obscure the spleen and sometime the gall bladder and even liver, can be pushed aside. The appendix, infrequently to be seen by the unaided peritoneoscope, can be as easily hooked up into plain view by the manipulator as it is by the finger at operation. Prolapsed female adnexae formerly inaccessible to peritoneoscopy, are easily lifted up for complete inspection on the tip of the rod. By means of the diathermy tip I have, under peritoneoscopic vision, divided painful intra-abdominal adhesions. Through the same sheath with a long needle, it would also be possible to aspirate cysts, etc. under peritoneoscopic guidance.

So far, I have used this auxiliary instrument 24 times and, in the great majority of instances, with gratifying results.



Figure 1

The new instrument, consisting of a small trocar and sheath, manipulating rod, carrying the airtight rubber nipple, and the insulated endo-thermy electrode.

**APPLICATIONS OF PERITONEOSCOPY:** With the potentialities of the instrument in mind, the peritoneoscopist will find himself applying the procedure to a widening range of diagnostic problems where other methods of solution have failed. Among the commonly accepted uses of the instrument are the following:

1. The differential diagnosis of diseases involving the liver and spleen, such as cirrhosis, carcinoma, Banti's disease, etc.
2. Determining operability of gastro-intestinal and pelvic malignancy by inspecting the liver for metastases or peritoneal implants.
3. Diagnosis of intra-abdominal and pelvic tumors in general.
4. The diagnosis of tuberculous or pneumococcus peritonitis.
5. The diagnosis of ectopic pregnancy.

6. Differentiation, in certain obscure cases, between obstructive and hepatic jaundice. Thus, in obstructive jaundice, one would expect a normal or bile-stained liver with gall bladder either distended as in cancer of the head of the pancreas, or deformed or involved in inflammatory adhesions, if the condition were cholecystitis with common duct stone. On the other hand, cirrhosis or hepatitis is diagnosed by gross appearance plus liver biopsy.

In addition, I would like to point out some new or little exploited applications of peritoneoscopy and illustrate by case presentations.

**RULING PENETRATIONS IN OR OUT IN ABDOMINAL GUNSHOT AND STAB WOUNDS:** (6) Although it is obligatory to explore surgically, gunshot and stab wounds of the abdomen when penetration cannot be ruled out clinically, in 12 to 15% of cases, no penetration is found at operation. Peritoneoscopy can, in practically all cases, answer definitely the question of penetration and thereby eliminate a number of negative explorations. By poking a hemostat through the debrided entry wound, so that the underlying peritoneum is tented inward, the region suspected can be accurately localized for inspection. The following case illustrates this.

T. D., a 22 year old white male, was admitted June 3, 1941, after having been shot through the right flank from behind, the slug lying subcutaneously 4 cm. below the right costal margin in the mid-clavicular line. It could not be decided whether the bullet had traversed the ab-



dominal cavity and possibly the right colon. Peritoneoscopy was performed and with the aid of the manipulating rod, the ascending colon and hepatic flexure were pushed medially, revealing the entire paracolic gutter in the affected region. No hemoperitoneum or penetration was found. Incidentally, without the retraction achieved by the rod, the depths of the paracolic gutter would have been inaccessible to peritoneoscopic vision. The patient's postoperative course was satisfactory and he was discharged on the 5th day.

**DIFFERENTIAL DIAGNOSIS BETWEEN APPENDICITIS AND SALPINGITIS AND BETWEEN APPENDICITIS AND CHOLECYSTITIS:** M. R., a 23 year old negress, was admitted, December 26, 1940 with the story of onset of abdominal pain 7 days before entry and one day after the onset of her last menstrual period. The pain at first periumbilical, soon shifted to the right lower quadrant. She was not nauseated. She had had one or two diarrhetic stools and no urinary complaints. Symptoms were becoming worse and the patient began to feel nauseated. Abdominal examination revealed marked point tenderness over McBurney's point, but no spasm. Pelvic examination was negative except for some reddening of the cervix. The temperature was 99.6°F. The white cell count was 14,000 with 90% polys and the sedimentation time was markedly increased.

The diagnosis lay between salpingitis and acute appendicitis, the house staff favoring the latter. Peritoneoscopy was performed. By means of the manipulating rod, the appendix, at first not visible, was hooked up into view and found to be normal. In the pelvis, both adnexae were found inflamed and swollen, but especially the right tube, from which brownish purulent exudate could be expressed with the rod. The patient was spared an operation and since has been followed in the Outpatient Department for her pelvic inflammatory disease.

J. P. was a 22 year old colored boy, who was admitted August 10, 1941, because of acute attacks of epigastric and right upper quadrant pain, accompanied by nausea and vomiting, often awakening the patient from sleep at night. He had had several such episodes in the past three months, but was otherwise well and free of any digestive disturbances.

Abdominal examination revealed the point of maximum tenderness and moder-

ate spasm just below the right costal margin. The temperature was 101°F., the white count 16,500, with 92% polys. However, the absence of food idiosyncrasy and the youth of the patient made a high-lying inflamed appendix a likely possibility.

Through the peritoneoscope a greatly distended and slightly injected gall bladder was found. Then, with the aid of the manipulator, the appendix was lifted up and found to be normal throughout.

Unfortunately, the patient, a non-resident, left the hospital before we could do a Graham Cole test.

**DIFFERENTIATION BETWEEN BLEEDING PEPTIC ULCER AND RUPTURED ESOPHAGEAL VARIX:** (Reported in Am. J. Surg., yet unpublished.)

Although the treatment of the massively bleeding peptic ulcer is still disputed by surgeon and internist, many authorities now advocate early intervention in patients 50 years of age or over. But in any event, ruptured esophageal varix may occasionally give diagnostic trouble. Two cases of massive hematemesis on our wards a year ago illustrate this point. The first patient operated upon for bleeding ulcer was found to have, instead, cirrhosis of the liver and ruptured varix. A similar patient with massive gastro-intestinal hemorrhage was admitted some time later and was peritoneoscoped. A typical hobnail liver was found; thus indirectly the diagnosis of ruptured esophageal varix was made. (Reported in Am. J., yet unpublished.)

**LYSIS OF INTRA-PERITONEAL ADHESIONS:** M. W., a 44 year old negro woman, had 5 years previously been injured in the right chest in an automobile accident. A mild sticking pain under the right breast commenced at this time and had become slowly worse till, during the past four months, it was practically incapacitating.

Physical examination was negative except for tenderness to pressure over the right lower ribs, uterine leiomyomata and rectal stricture. The blood Kahn was positive, the spinal fluid Kahn was negative. Chest X-rays, barium enema, G-I series and Graham Cole test were all negative.

A tentative diagnosis of painful Curtis' "violin string" adhesions between liver and diaphragm was made. At peritoneoscopy, April 29, 1941, a leiomyoma uteri and old pelvic inflammatory disease with scarred adherent adnexae were found. In addition, numerous dense adhesions were found between the right lobe of the liver and the undersurface of the diaphragm and anterior abdominal wall. Tugging on these

with the manipulating rod exactly reproduced the patient's sticking right chest pain. The rod was then withdrawn from the auxiliary instrument and the endothermy electrode inserted. Under peritoneoscopic guidance, the adhesions were then severed with the cutting current. Since this procedure, the patient has had almost complete relief from her former pain. She now cooks for a large family, chops wood and engages in other vigorous activities.

**RUPTURE OF FOLLICULAR CYST OF OVARY FOR UTERINE BLEEDING** (Reported in *Am. J. Surg.*, as yet unpublished).

S. T., a 23 year old white married woman, was first referred to us by Dr. Laman Gray, June 5, 1940. The clinical diagnosis was follicular cyst of the left ovary, hyperplasia of the endometrium and menorrhagia. The patient had been treated for three years by curettage and hormone therapy but the bleeding persisted. Our purpose was to rupture the cyst through the peritoneoscope as a last resort before surgery.

At peritoneoscopy, a retention cyst 6 cm. in diameter, was found in the left ovary. This was ruptured with the biopsy forceps and 2 ounces of straw colored fluid escaped. For 6 months her previously severe and prolonged menorrhagia gave place to occasional scanty flow or "spotting," and the endometrial biopsy which previously had shown hyperplastic endometrium, now revealed anovulatory, hypoplastic endometrium. The patient was so well pleased that, when flooding recurred after 6 months respite, she returned for further treatment.

Re-examination through the scope revealed complete absence of the previous cyst and a small, sclerosed, hypoplastic-looking ovary on each side. One last trial is now being made with a new lactogenic hormone and the outcome is, as yet, still uncertain. This case was reported in the *Am. J. Surg.* as yet unpublished.

#### SUMMARY

1. Peritoneoscopy has been described.
2. A new auxiliary instrument with manipulating rod and endotherm electrode is presented.
3. The routine and also some new applications of peritoneoscopy are described.

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#### DISCUSSION

**Laman A. Gray:** It is indeed a credit to Louisville to have a man of Dr. Hamilton's ability bring this new procedure to this city. As far as I know, he is the only one here to do it. He has mentioned the use of the instrument in functional uterine bleeding, apparently due to a defect or oversecretion of pituitary hormones, producing follicular cysts. There is lack of ovulation, absence of the corpus luteum and subsequent metrorrhagia. These cases are not so uncommon. It seemed a good idea to try rupturing these cysts with Dr. Hamilton's aid. In the first case he mentioned, it was most interesting how he did find a cyst which was opened and the patient had relief from bleeding. This did not mean a cure because she did not ovulate—she continued sterile—but it at least helped from the point of view of the hemorrhage. In the second case, thought to be of similar type, the patient was treated with hormone without results and given to Dr. Hamilton. He "scoped" her and found subacute salpingitis, at which diagnosis we blushed.

A most important gynecological use of this instrument is in the differentiation of unruptured ectopic pregnancy. That is a most serious condition occurring in gynecology and one of the hardest to diagnose. Usually the patient is pregnant, most often with threatened abortion, with pain, with a questionable mass to the side. We worry continuously until the problem works itself out.

In cases of differentiation between acute salpingitis and appendicitis when the symptoms are marked, I would be very much in favor of exploration and am not in favor of punching an instrument around a hot appendix.

I should like to use that instrument in my practice but there are two reasons for my not doing so, the first being that I am afraid of sticking a hole in the bowel and the second, I cannot see through it.

**W. O. Johnson:** Every one who knows Dr. Hamilton and has seen his work knows how good he is with the peritoneoscope.

The peritoneoscope like the bronchoscope and cystoscope have some things in common. They have a light on one end, which most any one can turn on and see through, but there are two other requirements on the other end to make it work satisfactorily—(1) the brains of the operator, and (2) experience in handling the instrument and interpreting the findings. Dr. Hamilton meets all of these requirements, therefore he can use this instrument with value, and we can use it through him.

The peritoneoscope has been of help to me in many perplexing problems. One case not long ago, who fifteen years ago had had a radical



removal of right breast for carcinoma, came under my observation two months after having had a diagnosis of "colitis." Pelvic examination revealed a bulging cul-de-sac with fluid and hard, neoplastic nodules in pelvic structures. Her general condition was such that operation was not desired, but correct diagnosis was necessary. Dr. Hamilton peritoneoscoped her, a gallon of bloody fluid was removed from the abdomen and through the peritoneoscope a specimen was removed from the liver surface. We were able to make out 2 or 3 carcinomatous nodules in between loops of the intestines and in pelvis. Centrifuged specimen from fluid removed from liver surface revealed undifferentiated metastatic carcinoma, probably arising from the breast. The diagnosis was confirmed and patient was able to leave hospital in a few days, and returned to her daughter's home. Had she been operated upon most likely she would have died in the hospital.

I agree with Dr. Gray that caution should be used in the use of the peritoneoscope in cases of acute appendicitis.

The peritoneoscope is a great adjunct in the surgical armamentarium and opens up a wider field of diagnosis in the abdomen, but one must remember that experience and brains for interpretation are most important factors in the use of the peritoneoscope. All of these are offered to us by Dr. Hamilton and he is to be congratulated upon his work in this field.

**Joseph E. Hamilton** (in closing): The peritoneoscope is an optical instrument, closely related to a cystoscope, though it visualizes through an air medium, whereas the cystoscope uses the water medium. I should like to stress once more that the chief function of the peritoneoscope is to render unnecessary laparotomies that formerly were required to make certain intra-abdominal diagnoses and, in other cases, to settle the indication for laparotomy when the physician is in doubt.

In answer to Dr. Gray's and Dr. Johnson's objection to "poking around," a possible acute appendix, with scope or manipulating rod, let me point out that I first examine the adnexae. If they are inflamed, I confirm the diagnosis of salpingitis by looking for a normal appendix. If the adnexae should be normal I would investigate the cecal region very cautiously, if at all, and would be inclined to proceed with an appendectomy.

Complacency would be stupid while tuberculosis is still causing more deaths in this country than any other communicable disease except pneumonia, and while there are less than a hundred thousand sanatorium beds to care for half a million people with recognizable clinical infection. Geddes Smith—"Plague on Us."

## TRICHINOSIS WITH A CASE REPORT

JAMES E. WINTER, M. D.

Louisville

**HISTORY:** The *Trichinella spiralis*, which is the cause of trichinosis or pork worm infection, was first seen by Tideman in 1821. The name by which it is known was given by Owen in 1835. It was first discovered in the hog by Leidy in Philadelphia. Zenker in 1860 first worked out the connection between a human case and the previous eating of pork. From this time on serious outbreaks have been recorded both in Germany and other parts of the world.

The *Trichinella spiralis* is world-wide in its distribution being particularly prevalent among Germans, Austrians, and Italians, who habitually eat raw pork in sausages and also raw spiced hams. Within the last ten years routine autopsy studies in various parts of the United States have revealed a human incidence of infestation varying from 3.5% in New Orleans to 27.6% in Boston. Dr. Malcolm Barnes has run a series of almost four hundred autopsies at the Louisville City Hospital with an incidence of 15%.

These facts would lead one to believe trichinosis is a very common disease which is frequently unrecognized as it is seldom reported. However, another factor must be borne in mind. There must be a sufficient density of infestation before clinical symptoms are manifested. A concentration of 5 larva per gm. body weight is sufficient to cause death in man.

The worst epidemics have been traced to hogs fed on garbage from sources having a high content of uncooked meat. In this country about 1% of all hogs have been found to be infected while over 4% of those fed on raw garbage are infected. Rats are frequently infected and as they are carnivorous, it is thought that they pass the infection among themselves. Occasionally hogs may eat dead rats and become infected. It has also been reported in human beings from eating bear meat dried and eaten raw.

**PREVENTION:** Pork should never be eaten unless thoroughly cooked. The larva are killed by exposure to a temperature of 55°C. or by exposure to 5°C. for 20 days. Thus prepared meats which have been satisfactorily processed are safe to eat. Care must be taken in cooking pork to

cook it long enough for heat to penetrate to the center of the meat, otherwise portions may be capable of carrying the infection.

Garbage, which is fed to hogs, should be cooked at least one-half hour with all pieces of meat cut into pieces of a pound or less. Cases of trichinosis have been contracted from eating hamburgers at roadside stands which have been improperly cooked.

**LIFE CYCLE:** The adult male worm measures  $1.6 \times .04$  mm. with the female measuring  $3-4 \times .06$  mm.; the young larva are about 0.1 mm. long. The life cycle of the adult worm is from 4-5 weeks. In the encysted form, they may remain alive for many years.

When the encysted forms are fed to animals or taken into the intestinal tract of man, they mature in the small intestine within 24-48 hours. The maturing female burrows into the mucosa and deposits larva directly into the lymph spaces from which they are carried into the blood stream, through the lungs, to all parts of the body. They are most numerous in the circulating blood between the 8th and 23rd day after infection. The larva leave the capillaries and penetrate the tissues, particularly muscles with rich blood supply. They produce an intense inflammatory reaction and are destroyed in tissues other than muscle. The invaded muscle fibre undergoes inflammation and degeneration. A cyst wall of collagen fibres is formed about the larva about  $0.5 \times 0.25$  mm. Eventually calcification of the cyst walls occurs, usually in from 6 months to 2 years. On sections these appear as fine white granules.

**CLINICAL COURSE:** The earliest symptoms are usually referable to the gastro intestinal tract. These may be nausea, vomiting and diarrhea accompanied by chills and fever reaching as high as  $104^{\circ}$  or  $105^{\circ}$ . There may be an erythematous rash. Localized edema is frequently present. There may be symptoms referable to the central nervous system such as intense drowsiness, delirium or coma.

During the period of dissemination, being about a week later, there is intense muscular tenderness frequently accompanied by muscular pain; there may be marked dyspnea.

The stage of encystment begins about 6 weeks after onset. It is characterized by marked edema, particularly of the face, continued muscular tenderness and may

be complicated by secondary pulmonic infection.

**DIAGNOSIS:** The most characteristic laboratory finding is a gradual increase in the eosinophiles beginning about the 2nd week. Later the eosinophiles decline in number. They may reach 50% or more. Occasionally they are not increased. The symptoms vary greatly, about the only one constantly present being persistent muscle tenderness. Examination of the blood, spinal fluid or feces sometimes may reveal the parasite. Microscopic examination of the muscle reveals the larva in less than 50% of the cases.

Serologic precipitin tests and skin tests are also used and when found positive can be relied upon.

**DIFFERENTIAL DIAGNOSIS:** The disease may be confused with acute arthritis, typhoid fever, acute gastro enteritis, food poisoning, colitis, encephalitis, meningitis, and anterior poliomyelitis.

**PROGNOSIS:** The average mortality is 2% although in epidemics it may reach 30%. In a recent epidemic with almost 250 cases in an American city traced to one source, it was necessary to hospitalize 50 cases and there were 5 deaths.

**TREATMENT:** There is no known way of destroying the parasites in the body. The treatment is symptomatic and supportive during the acute stage.

**CASE REPORT:** Mrs. J. V. D. Age 26, married 4 years, previous illness, influenza 1938, cystitis 1937. Present complaint: Began September 25, 1940 with extreme drowsiness followed a few days later by intermittent pains in calves of legs. She was first seen Oct. 2, 1940, at which time she had no elevation in temperature and no muscular tenderness. Reflexes were normal and remainder of physical examination was negative. She was next seen Oct. 7, when she complained of intense drowsiness and marked muscular pains and muscular weakness. Her temperature was  $99.2$ , pulse 84. She was nauseated and vomited occasionally during the next few days. Her highest temperature was  $100^{\circ}$ . Spinal puncture revealed a cell count of 2 lymphocytes with no increase in globulin. Reflexes were normal throughout. She gave a history of having come to Louisville one week before onset of symptoms from a city in Ohio where there was a severe outbreak of anterior poliomyelitis. On October 15th her blood count revealed an eosinophilia of 8%. A tentative diagnosis of trichinosis was made.



By this time she had developed considerable edema of the face and calves of her legs and there was a persistence of the muscular tenderness. The muscular pains and drowsiness had greatly decreased. The diagnosis was confirmed October 25th by a skin test.

In January she was hospitalized for several days with an attack of influenza. At this time her blood count no longer showed an eosinophilia.

About March 15th she had a return of her original symptoms of drowsiness, muscular pains, and increased muscular tenderness, which are now subsiding.

#### DISCUSSION

**Hugh R. Leavell:** There have been many articles in the literature about the high percent of infestation with about 15% of those examined being positive. It does seem quite likely that a great many people have symptoms which are never diagnosed.

With regard to the incidence in hogs, there is a fairly high rate in the South,—more than in the West where hogs are fed almost entirely on grain. The highest incidence is in New England where garbage is fed the hogs.

From the standpoint of meat inspection, in Germany for many years they tried to make microscopic studies of hogs to determine whether or not trichinosis was present. In this country, in spite of elaborate inspections by the Federal Government we have no way of assuring the public of trichina-free pork. The only possibility of prevention is first, feeding of hogs, that is, feeding garbage that has been cooked, if garbage is to be used. Second, seeing that every person eats well cooked pork. Evidently epidemics, such as Dr. Winter mentioned, occurred in institutions where the center of large pieces of pork had been improperly heated.

**F. W. Caudill:** How long after giving the antigen intradermally can the skin test be read?

**James E. Winter** (in closing): The skin test was checked by the U. S. Public Health Service. The reaction occurs very rapidly, a wheal forming within a short time. It can be felt better than it can be seen. It contains small pseudopodia and may be surrounded by an area of erythema. The reaction lasts about an hour and then fades away. Occasionally a delayed reaction occurs about 24 hours after injection.

Tuberculous disease is usually the cumulative effort of several factors besides the infection with tubercle bacillus. An infection with tuberculosis under favorable conditions is no serious danger. However, if resistance is broken by malnutrition, over-exertion and lack of pure air, infection will progress. Jules Holo, M. D., Amer. Rev. of Tuber., Dec., 1939.

#### MEDICAL MONUMENTS

J. M. SALMON, M. D.

Ashland

In the village of Saranac Lake, New York, seat of the Trudeau Sanatorium, there is a remarkable statue. It is situated upon a terrace just below the sanatorium and is of bronze, the work of the famous sculptor, Gutzon Borglum. It represents the life-sized figure of a man of delicate physique and thoughtful expression seated upon a reclining-chair and gazing over the wooded slope at the foot of the Adirondack Hills toward the Saranac river and the lake below. Symbolically, the Sanatorium, his life work, is behind him and Dr. Edward Livingston Trudeau looks forward as though seeking new adventures, again sailing an uncharted sea. He came of a family rich in medical tradition. His father, Dr. James Trudeau was a member of a well-known New Orleans family. His maternal grandfather was a French physician whose ancestors for many generations were physicians. Although born in New York City, Trudeau received his early education in Paris where he lived with his grandfather, Dr. Francois Berger who had retired. At the age of seventeen, he returned to New York and after several years of study in a preparatory school, decided to study medicine. He entered the College of Physicians and Surgeons and after three years was graduated and entered upon practice in New York. He was married early and was succeeding in his practice when the blow fell which was to change the course of his life. He developed pulmonary tuberculosis in 1873 and was obligated to give up his work. At that time nothing was known of the cause of transmission of the disease and the prognosis was unqualifiedly bad. Trudeau decided to go to the Adirondack mountains, not because he expected to be benefited by the climate, which was considered inclement and rigorous, but because of his great love of the forest and wild life and the memory of many delightful hunting and fishing trips in this region. Rest was necessary and a change of surroundings from the city to the peace of the great wilderness promised diversion for the few remaining years of life.

But the constant rest in the open air soon had a wonderful effect, the fever left, appetite and sleep improved, hope re-

turned. After two years the remission of the disease permitted a limited amount of practice among the permanent residents of the community. Dr. Alfred Loomis, of New York, who had been impressed by the favorable course of Trudeau's illness, sent occasional patients to the Adirondacks to be treated by Trudeau and thus, largely through an article by Dr. Loomis which appeared in the Medical Record, the region became known as a health resort for patients with pulmonary disease. Gradually the number of patients increased and, as Trudeau's health improved, his interest in his profession also increased.

The idea of building a Sanatorium originated with Trudeau's reading, in an English journal, an account of Brehmer's Sanatorium in Silesia, Germany. Brehmer originated the sanatorium method, the essence of which was rest, fresh air and daily regulation of the patient's habits. It was difficult to obtain accommodations in the Adirondacks for patients of moderate means and there was no place for working men and women with little or no money. Thus the future sanitarium began with a foundation of faith in the idea of Brehmer and in love of humanity.

Dr. Loomis promised to cooperate by offering to examine free of charge all poor people who applied to him and to send suitable cases to the proposed sanatorium. Through subscription of friends, solicited largely by Trudeau, sufficient funds were raised to begin construction. The site was near the present location, his favorite fox runway, and in 1885 the sanatorium consisted of a small rough-board and shingle barn, one unpainted wing of the main building without any porch and one small unpainted cottage. The patients—two frail ill-clad factory girls. The Staff—a farmer, his wife and two daughters. The location—an unbroken forest forty-two miles from the nearest railroad. The unpainted cottage later received a coat of red paint and is still known at the sanatorium as "the Little Red." It was the pioneer cottage in the development of the sanatorium treatment in America and has stood for a great principle of treatment which will long survive the little building.

In 1882, Dr. Robert Koch published in Germany his epoch-making paper on "The Etiology of Tuberculosis." A few abstracts of the article appeared in the medical journals but the physicians in this country for many years remained indifferent to the alleged discovery of the tu-

bercle bacillus. Even Dr. Loomis at first said he "did not believe much in germs." However, in the next edition of his Practice of Medicine he accepted Koch's theory.

Through Mr. C. M. Lea, of the publishing house of Lea and Febiger, Trudeau obtained a complete translation of Koch's paper and studied it thoroughly. He was convinced of the soundness of the deductions and determined to test the experimental results. Having had very little training in bacteriology, he went to New York and painstakingly worked in the dingy laboratory of the College of Physicians and Surgeons under Dr. T. M. Prudden, who had worked in Koch's laboratory. After he had acquired the necessary knowledge and skill, he returned to Saranac Lake and built a little addition to his office, the laboratory, with crude equipment, which served until 1893 when it was destroyed by fire originating from the home-made thermostat, heated by a kerosene lamp without any regulatory apparatus. With this humble outfit, he began the conquest of the tubercle bacillus. He was the first in this country to cultivate the bacillus and confirm Koch's brilliant discovery. This enabled him not only to make early and positive diagnosis but also to conduct experiments to show how change of climate, rest, fresh air and food could influence the disease. Three series of rabbits, five in each series were chosen for the first experiment. The first series were inoculated with pure cultures of the bacillus and put under the best possible conditions of light, food and air obtainable. The second lot, similarly inoculated were put under the worst conditions of environment. The third lot were put under equally bad conditions without being inoculated. Of the first lot, all but one recovered. Of the second lot, in unfavorable surroundings, four died of tuberculosis within three months. Of the third lot, not inoculated but kept under unfavorable conditions, none died although all were emaciated. Thus he demonstrated conclusively that bad surroundings of themselves could not produce tuberculosis, but if once the germs had gained access to the body, the course of the disease was greatly influenced by favorable or unfavorable environment. These simple principles, now commonplace, have saved and prolonged many lives and are applied all over the world. From the ashes of the primitive laboratory sprang the Saranac Laboratory for the Study of Tuberculosis, from which



have come and are coming many notable contributions to the scientific knowledge of the dread disease. The Adirondack Cottage Sanitorium and the Saranac Laboratory were the precursors of a movement which has extended to all parts of the nation and has brought hope and life to many thousands who under former conditions would have been doomed to despair and death. This is the real monument to Edward Livingston Trudeau; the bronze statue is only a memorial.

Recently I stood before another statue in Montgomery, Ala. the first capitol of the confederacy. The bronze statue stands on the spacious lawn before the entrance of the historic old capitol building. It represents a surgeon attired in operating gown, one gloved hand raised in a characteristic gesture, a serious expression on the familiar countenance. I imagined that I heard again the introduction to his clinical lecture—"Gentlemen, today we shall consider certain aspects of intestinal obstruction."

It is most appropriate that the memory of her distinguished son should be thus honored by his native state for not only did he volunteer for service in the Lost Cause, as a private soldier in the army of Gen. Nathan B. Forrest (whose biography he later wrote), but his achievements in his professional career marked an epoch in medical history.

John Allen Wyeth, entered the Confederate army at the age of eighteen. After the conclusion of the war he matriculated at the University of Louisville and was graduated in 1869. He pursued his medical studies in New York and was graduated in 1873 from Bellevue Hospital Medical College. Immediately after graduation he was appointed demonstrator of anatomy in this institution. He was surgeon to Mt. Sinai Hospital from 1880 to 1897 and soon won recognition as one of the leading surgeons of New York. His Text Book of Surgery appeared in 1888 and for many years was a standard text-book in American Medical colleges.

As a surgeon, he was noted for his technical skill, sound judgement and diagnostic ability. His knowledge of anatomy was acquired by long study and practical demonstration in the dissecting room. This was supplemented by research work in comparative anatomy. I once heard him tell the following anecdote: Arriving at his home one evening, very late for dinner, his wife inquired the reason for his tardi-

ness. "Well, I've been working at the Zoo," said he. "What! Again?" she exclaimed. "What was it this time?" "Camel," he replied. "Well," she remarked, by this time detecting a disagreeable odor emanating from his person "I certainly hope you are through with it." "Not quite" said he, "but I think I'm over the hump."

Wyeth's bloodless method of amputating at the hip and shoulder joints, an operation which previously had been attended by a very high mortality because of hemorrhage, was one of the greatest contributions to surgery and its use has saved countless lives. He introduced many ingenious procedures to simplify what had been complicated operations. As a teacher he was unsurpassed. He had a remarkable command of clear, terse English. Under his instruction all vagueness and ambiguity vanished.

It was in 1882 that he began his greatest work. Through his contact with physicians who came to New York for observation of medical and surgical work in the various hospitals, he perceived that there was no adequate post-graduate medical instruction in the United States and he recognized the great and growing need of such instruction. He determined to organize a post-graduate medical school and hospital which should make available to physicians and surgeons practical courses of instruction in the various specialties of surgery and internal medicine.

Accordingly, with the aid of friends in the profession and a few sympathetic laymen, he organized the pioneer institution of its kind in the United States—The New York Polyclinic Medical School and Hospital. From its beginning in a modest structure on East 34th Street, the institution has developed into the present School and Hospital buildings on West Fiftieth Street. Many other post-graduate schools have been established but the pioneer work of John Allen paved the way for better medical surgical service. This is his real monument.

Turning from the statue of Dr. Wyeth, I noticed another bronze, only a few yards away. It had been recently unveiled, (1940) in memory of another and earlier member of the medical profession, Dr. James Marion Sims, to whom not only Alabama but the whole world is debtor. The origin and early career of great men has often been most unpromising. In 1835, Sims, who had received his medical education in Charleston S. C. and later in

Philadelphia, began practice in Lancaster, S. C. After he had had two patients, both babies, and both had died, he tore the tin sign from his office door and dropped it into an abandoned well. Then for the next five years he traveled on horse-back through the undeveloped southern states, disgusted with himself and his profession and wishing, as he expressed it, that he were a tailor or a cobbler so that he might earn a living undisturbed by the inadequacy of treatment and the constant association with pain and death. At that time venesection was "the bloody Moloch" of medicine and anaesthesia was unknown.

Finally he settled in Montgomery, Ala., where he found enough patients (chiefly negro slaves) to enable him to live in modest style. His work was general but it is significant that he reported a "Successful Operation for Stabismus" and a "Hypothesis on the Cause and Treatment of Triismus Necnatorum." He also operated successfully for club-foot, showing increasing interest and versatility in his work. It is interesting to note that he "hated above all things the investigation of the organs of the female pelvis." Gynecological patients were invariably informed "This is out of my line." Obstetrics in that day was a crude art and birth injuries were common and not repaired. Among negro slave women permanent disability frequently resulted from such injuries, chief of which were vesico-vaginal and recto-vesico-vaginal fistulae with incontinence of urine and feces. These cases were frequently referred to Sims and, after many refusals and much against his inclination, he decided to investigate and possibly attempt a cure. He built a crude little hospital for six of these slave girls and kept them at his own expense for four years. He devised a duck-bill speculum from a pewter spoon and, examining in the knee-chest position, he was able to obtain better exposure than by the text-book methods, because he applied the principle of air pressure. He studied the few available reports of treatment, nearly all unsuccessful. One day he noticed a piece of very fine brass wire in an old suspender and immediately conceived the idea of using fine silver wire as suture material. His first patient had a recto-vesico-vaginal fistula and he had operated unsuccessfully twenty-nine times. The case seemed hopeless but, with his new sutures and with improved technique, he tried again and was successful. He repeated this experience in other cases and

published his results. In 1853 he went to New York where he received immediate recognition. In 1885 he organized the Woman's Hospital which was built on the pavillion plan through an appropriation of the state legislature. Of this hospital he writes, "From the day it was opened it had no friends among the leaders—among hospital men. I was called a quack and a humbug and the hospital pronounced a fraud."

In 1861 he went to Europe. In France he operated in hospitals with remarkable success. The most hopeless cases were brought to him. One patient had had a vesico-vaginal fistula for twenty years. No one could help her. Because a bed could not be obtained for her in any hospital, Sims offered to operate in his hotel. The operation was performed in the presence of the famous surgeons of France: Nelaton, Larrey, Velpeau, Huguier and others. In one week's time, when the sutures were removed, the patient was found perfectly cured.

Sims was urged to come to London. He was decorated by the governments of France, Portugal, Spain, Belgium and Italy. No American breast had been covered by so many ribbons. His work and teaching revolutionized the study and practice of gynecology. Two statues, one in Bryant Square, New York City, the other in Montgomery, Alabama stand as memorials to his service to humanity. But the little hospital for the slave women was the foundation of the monument whose superstructure is represented by the great multitude of women who have been saved from a living death by his work and teaching.

These three American medical monuments commemorate the conspicuous services of three great physicians. But far more important than statues of stone or bronze is the inspiration of their example, their challenge to take from their hands the falling torch and carry on.

True greatness is a product of body, mind and soul. It is the result of continuous growth from beginnings, often insignificant and obscure, to a completion which is acclaimed by all of its beneficiaries. This growth must have inspired Dr. Oliver Wendell Holmes when he gazed at the spiral shell of the chambered Nautilus. The builder, now departed, had begun by enclosing himself in a calcareous shell; then, as he grew, he built another and larger apartment and so, throughout



his life, he built mansions each larger and more beautiful than the last.

"Build thee more stately mansions, O my Soul,

As the swift seasons roll!

Leave thy low-vaulted past!

Let each new temple, nobler than the last,

Shut thee from heaven with a dome more vast,

Till thou at length art free,

Leaving thine outgrown shell by life's unresting sea."

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### MALIGNANCY

H. C. CHANCE, M. D.

Pineville

There is too much to cover in the field of malignancy even as I am about to do it so I am leaving out the leukemias and most of the sarcomas.

There are some varieties that are fairly common in old folks, although youth is not an absolute bar to any of the different types of malignancy. For instance four of the last fifty cases of cervical cancer have been in patients under thirty and five of the last fifty breasts were under forty, 2 under 30.

Of the two main types of skin cancer the incidence in patients under thirty is slightly above 1%.

There is however a very severe type called Malignant Melanoma usually developing on moles or birthmarks that seem to have very little variation at different ages, at least no age seems exempt.

The two most common types are basal-cell epithelioma which appears most often on the upper half of the face and occasionally on the neck. It grows very slowly and ulcerates late and probably never metastasizes. It will often be present for as high as twenty years before it looks real bad. It will eat off some prominent part of the face if given time enough.

Some of these seem to build up and make a tumor and some of them seem inclined to show a mixture of squamous cells, a bad mixture and really more dangerous than either singly.

We have a rodent ulcer as subdivision of this disease and a real mean condition to cure because it is almost impossible to see where it reaches and if a little corner is missed it comes right back.

The other is squamous cell which likes to

appear on the lower lip, ears and backs of the hands. This is much more rapid in development and metastasizes early and we long thought it was radiation resistant to very high degree, but this type wants to return and if there is not thorough removal is sure to recur.

The diagnosis of these is very simple, the first will come with a dry scab somewhere on upper part of the face and after a varying period this scab will drop off and the place looks to the unpracticed eye like it was gone for good but after a few days another scab appears, usually a little larger and repeats the same course. This may continue for years but in its own good time it will form an open ulcer which steadily increases in size and either piles up cells to form a tumor or elevation or goes down into the deeper layers of the skin and extends on into periosteum or even bone and then it is truly malignant and resists treatment to a fare-you-well.

The squamous type usually looks very like a fever-blister or cold sore on the lip but doesn't get well and early begins to infiltrate deeper structures. On the lip its diagnosis should be easy. Any sore on the lip of a middle aged or old person that fails to get well in three or four weeks should be immediately under suspicion. Especially if it is slowly increasing in width and depth.

The same rules apply to this type of disease when found on the hand. It was long thought to be incurable by radiation but now we know our former dosage was too low and that dose of eight erythema skin doses will cure just about all of these. They early go to the lymphatics and according to experience of most workers along this line this makes it much more dangerous and much harder to cure because the skin over the node will not bear sufficient radiation to cure and a mass dissection especially in the neck is very hard to do successfully.

Following the technique of Chaul with his contact tube of low voltage radiation after removing the node in which he claimed 60% cures, I think I have him bested by removing the glands with cutting current and holding open the wound with stitches, I am giving 3000 to 3500 rs to the bed from which it was removed and then allowing the wound to heal by granulation.

He uses a uniform voltage of 60 kv, I am using from 100 to 160 kv as above outlined and getting around 90% of three year cures that will drop off to about 80% of five year cures.

This is also one of the three types most common in cervix uteri and usually comes on the mucosa of the vaginal cervix. It has a peculiar feel and with the bare finger almost any clinician with a few years experience will make a correct diagnosis in almost every case. It does not feel like tuberculosis or chancre, the only two things it can be confused with that occur very often. This refers to a very early condition. After it has been there for a few months it assumes a depressed look or craterform if near the os uteri. It is the most common cancer of the cervix. Adenoma begins inside the canal and may stay invisible until of considerable size and parametrial extension has occurred before it can be seen on looking at the cervix with a speculum. It will show some local bulging of cervical walls, usually in anterior lip and feels hard in spots or one side of cervical body. This type produces a sanguinous discharge we hear so much of as having been present during the past year before we see the patient.

This sometimes turns out and proliferates rapidly, becoming a cauliflower in a small way.

The true cauliflower is usually of the type known as carcinoma cutis or epidermal cancer possibly of a mixed type. It is at least fairly easy to make the diagnosis as it is very friable, pieces breaking off in course of examination and bleeding freely for short time after touching. There has been an effort made all along to show us that there is a demonstrable difference in the response of these types to radiation but alert observers have about decided that the extent of involvement has more to do with the response to treatment than the histologic type of disease. Still I can't help feeling that I have a better showing for cure or amelioration in the cauliflower than either of the others. The patient who complains of considerable discharge, and says she spots her clothes on a mis-step or jar—even rapid driving on rough road always needs competent and careful examination. If still menstruating she says the flow is too heavy or lasts too long or comes too often or all three.

If she says she did not menstruate for months or years and then menstruation returned be sure she is carefully examined, if too lazy to do it yourself refer her to some one who will go into the case thoroughly and not rest until everything is cleared up.

It is sometimes remarkable how a doctor

will procrastinate on this point even when requested to examine for cancer.

As long as there is no pain and flowing some doctors wait for these signs as well as odor in the discharge, when to wait for these in some cases only leaves the patient a few weeks to live. Any cardinal symptom of malignancy may be absent and yet the case be far gone on the downward road. I was recently bearing down on a lady for delay and she told me I was the seventh physician she had gone to in the last year and the fourth who had examined her and the first to agree with her own diagnosis but this made it too late to even palliate her condition materially. She named the six for me and I had to take it. We think sometimes that we doctors are the proper thing but are we?

Another hopeless case showed up with plenty of diseased cervix and two or three patches of cancer in vagina, one very ugly, one on the vestibule who told me her Doctor had sent her blood off three times during the preceding six months for testing for syphilis.

It is hard for me to believe that a Doctor could exhibit such crass ignorance after four years in medical college and a year in a hospital. They will come in and tell you the Doctor said he could find no sign of disease when the cervix is just a shell with an extensive crater that extends up to the internal os with blood debris oozing from the canal. I don't know what to do with this situation because the doctors who fail so signally on this one condition never attend any postgraduate lectures or medical society meetings and where are we going to reach them.

We talk of trying to make the women cancer conscious. What about the doctors?

I always say that so far as the cervix is concerned that an ounce of prevention is worth a ton of cure but I am continually seeing patients who have been examined by a leading physician and the uterus given a clean bill of health when the cervical canal is harboring a chronic infection which shows the whole list of pus producing germs. I am also sorry to state that not all these mistakes were made by our so-called old fogies but some by men fresh from hospital internships after four years in a modern medical school.

Malignancy of the body of the uterus is almost always adeno-carcinoma in the aged with an occasional cutaneous or epidermoid type and in the younger we have sarcomatous degeneration of a mucosa usually made rough by fibroids, in other



words fibroids frequently degenerate into sarcoma. These are very hard to even ameliorate and very few are ever cured. The others are now subject of very strong debate between the surgeon who has many cures to his credit and the radiologist who is also beginning to turn up some nice statistics.

Metastases is not early in body cancers like in cervical and therefore the surgeon is holding on desperately to this as a cause for hysterectomy and Bloodgood who once argued that the knife was the remedy in all malignancy only agreed after he had quit work that radiation might give as good or better results in uterine body cancer. My limited experience and extensive comparisons of the many tables I have seen make me think that a combination treatment would give better results than either surgery or radiation alone.

I have not dwelt on the diagnosis of uterine body cancer for the reason that it requires a great deal more skill and care in the examination than does a cervix case.

You can't see the diseased area nor feel it and after the extra bleeding appears accompanied by watery odorous discharge it is getting pretty late to save the patient.

In adenoma and in chorioepithelioma that I failed to mention above microscopical examinations of tissues removed by curettage is about the only way to get at it for certain and I am afraid that some at least have had the disease spread by this interference.

I am now going into the breast conditions that we are also seeing very late in the course of the disease. We have taught for a lifetime a woman with a lump in her breast should immediately consult her physician, but let's see where we have gotten with this doctrine.

Dr. Portmann of Cleveland, a very able writer on cancer of the breast, gives us a list of symptoms which should be our guide on operability. A breast is inoperable if there are demonstrable nodes in axilla, also if there is pig skin or orange skin over the tumor.

If the tumor is adherent to the overlying skin or to the chest wall, or if there is ulceration, if the radiograph of lungs or spine show metastases, any two of these he says precludes operation in the Cleveland clinic where he works. According to his rules I have never seen an operable breast. They are always too far gone when they show them to me. In fact I have never seen a true malignancy of the breast when

there was the slightest doubt about the diagnosis.

I have worried my brains sore over breast tumors that proved to be benign, I have recommended removal of breasts that were benign and I have treated heavily cases that I now think were benign and of course these all got well but are not included in my reports of malignant breasts cured.

We have in the breast a scirrhus that lasts a long time and metastasizes late but is hard to cure and make stay cured.

Also adeno-carcinoma as in all glandular tissues a radio-sensitive tumor that metastasizes early and to many places, sometimes cured and occasionally does not recur.

We have an acute inflammatory cancer of the breast that would be radio-sensitive in the first week or two but is very rapidly fatal, rarely allowing the patient six months of life.

We have a cancer named for its discoverer, Pagets, which is an eczematoïd disease of the nipple and areola extending down the milk ducts usually.

This looks to me to be a plain squamous celled carcinoma and is amenable to heavy doses of X-rays. You don't fool with it though for if you do it does not get well, I have seen it complicating adeno-carcinoma. We can of course have sarcoma of the breast, I have not seen it but I was so unfortunate as to see a melanoma on outer surface of breast starting from a brown birth-mark size of half dollar, which was irritated by a poorly fitting corset. She was a fine young woman and a special friend from childhood and her case made a very profound impression on me. I hoped to be spared the sight of another. A very intriguing case came in a few weeks ago—a lady with a doubtful breast that had been X-rayed heavily with a 80 kv unit operating a self rectified tube, the breast fairly large had a tumor with its nearest part at least three centimeters deep and this tube would reach a short one half centimeter and operate for all of a minute. She was discouraged with X-ray treatment. Why does a man do that? Does he kid himself or only his patient?

One point I always emphasize in breast malignancies, if menopause has not yet come it must be attended to at once. Usually can be readily brought about by X-ray to ovary. 250 rs delivered to the ovary not to the skin over it will do the trick if patient is forty or over but will take more if younger.

I have not touched on biopsy but will now give you my view of it. Indiscriminate cutting or punching out pieces of any malignant growth will almost certainly increase chances of spread and while it is the only way to find out the type of disease and in some instances the only way to know that it is malignant it should be done if at all very carefully. Warren of Harvard advises to get your specimen then cauterize the surface it comes from and within a few hours or better still a few hours before getting your specimen give at least one full erythema dose of X-ray.

We are fortunate indeed if we can rely implicitly on the laboratory. Some of them give reports without very definite study and I have had wrong reports both ways on tissues.

Again we may get tissue very close to disease and yet get perfectly sound tissues and some laboratories always try to guess for the best interest of the patient. Now I want to say this rambling talk is intentionally unconventional. Its only purpose is to make you think, but like all papers of this type the men who should hear it are not here. Now if any of us can get a patient examined earlier let's do it and if we are not prepared to make a diagnosis ask for help and try to give them treatment according to the golden rule, the oldest guide for humanity that has been given to us.

### AN ANALYSIS OF THIRTY-SEVEN CASES OF SYPHILIS

THOMAS AUGUSTUS GRIFFITH, M. D.

Mount Vernon

Of this number five cases are congenital, two of which had eruptions of the scalp which were similar to ringworm. In one of these, the eruption was merely coincidental, being truly ringworm of the scalp associated with the congenital lues. The other eruptive lesions cleared after 2-3 injections of bismuth subsalicylate intramuscularly. I also alternate with sulfarsphenamine intramuscularly in congenital lues. Two cases of congenital lues are twins whose father has been inadequately treated. Recently, I delivered the mother of a well baby girl, however, she has not adhered to our plan of treating every pregnancy intensively. There was one stillbirth whose mother had received only three or four injections of bismuth. The other premature infant died in a week despite my

placing it in the health department incubator and administering stovarsol per os. This occurred during the bleak past winter in contrast to the present opposite summer weather. There is nothing unusual about these cases of congenital syphilis with the exception of only one of five is receiving adequate antisiphilitic treatment; unless, without my knowledge, they are attending the health department which I pray is the case.

Acquired syphilis is common. Two cases of thirty-two showed primary lesions and typically a fading secondary macular eruption. Both cases were started on .9 gm neoarsphenamine. Both cases offered diagnostic difficulties, the chance of one being an oblong shallow ulcer as large as a quarter lying below the umbilicus. The young man, in marked contrast to most of the cases, has received over 100 injections. The other patient was told he had trench mouth in a neighboring town and a dentist removed every tooth. When he came to me I begged him to go to Lexington for a dark field examination of the penile sore which possibly could have been part of an erythema multiforme. In fear that he would not go for a dark field, I took a blood specimen which showed a positive Kahn. In secondary syphilis the blood is always positive and the old Wassermann test was always plus four. Four cases showed sore throats and one of the four had trench mouth organisms in the throat. She had syphilis and Vincent's angina. Neither of the four have had adequate treatment to my knowledge. It is well to stress at this time that before treating trench mouth with arsphenamine be certain to get a Kahn test.

Before ending the discussion of secondary syphilis, it is interesting that this stage may subsist for months and at times the arsenicals will not relieve the eruption. This happened in a negress who had an eruption in her anterior cubital spaces and after beginning bismuth this quickly faded. This eruption was located where exfoliative dermatitis occurs. However, I was following this case with frequent blood examinations and advising sodium phosphate before arsphenamine injections. Arsphenamine should also be given on an empty stomach, as you well know. My attention is called to a female aged 36, who has frequent attacks of conjunctival lesions simulating styes and acneiform eruptions of the face. She consulted an eye



man who advised foreign protein injections with a few minims of insulin which injections failed. My recollection of what an old family physician had told me of the patient having once had a two plus Wassermann led me to inject bismuth with startling results. This is very confidential information which one family doctor gives to another.

I appreciate it more than you know and the patients show their appreciation by being relieved of resistant symptoms and lesions. The physician should ever be on the watch to pass the word that this or that patient had a positive blood with two of three arsenicals years ago.

This condition, two or three injections of arsenicals years ago, is a dangerous thing. Most of my remaining cases fall into this class. From eight to ten years ago they received a few injections. One man, age 50, had his initial sore ten years previously and was at this time suffering from decompensated heart disease. He leaped from a moving coal truck above Livingston one afternoon and died the following day. He had only a two plus Wassermann which is characteristic for vascular syphilis, i. e., these patients frequently have a negative blood test. I have noticed, too, that vascular syphilis and syphilis of the central nervous system are frequently present together, in contradiction to my earlier teaching. It was postulated at that time, I believe, that there was a neurotropic and vasculotropic spirochete. Several of the patients gave sciatic radiation of pain, and symptoms of cardiac neuroses. It requires special study to determine whether there is actually aortic involvement or lues of the central nervous system. One of many cases had tabes dorsalis so extensively that he was thought to be intoxicated.

Without further mention of syphilitic heart disease, I would like to say that the involvement of the myocardium may occur occasionally.

Another patient, female, age 42, complained of afternoon fever, general malaise and disturbed menses. She had a two plus Wassermann three years ago and had felt better following three injections. During the winter a doctor treated her for sciatica. She had a negative chest plate. After three injections of bismuth she felt better and stopped treatment promptly. Although this patient did not have tuberculosis it is well to mention that tuberculosis and

syphilis are frequently found in the same patient and it is the consensus of opinion that tuberculosis might improve under antiluetic therapy. Many of these cases of tertiary syphilis have consented to spinal punctures and I have found lues of the central nervous system in two. I have one patient who has a hole in her nasal septum and is Kahn-fast. I have given her an ample course of all syphilitic drugs and her spinal fluid is negative.

There is also a congenital case with saddle back nose to whom I have given some bismuth injections and prescriptions for saturated solution potassium iodide.

There are other interesting cases which I shall only briefly mention:

(1) Male, destruction of right mandible; the bones involved are skull, tibia and clavicle.

(2) Female with falling hair who complained to me on Broadhead Street one day. Three years previously she had had a miscarriage while living up Calloway Creek.

(3) Case with hemianesthesia thought to be menopausal symptom with initial lesion ten years previously. Good results followed injections of tryparsamide, 2 gm intravenously bi-weekly. After a few arsenicals and bismuth she was also given estrogenic hormones and she felt well. Spinal fluid positive. Optic discs were negative.

(4) Female with generalized tremor due to hyperthyroidism with exophthalmos probably, secondary to luetic thyroiditis. She had a syphilitic child which died; Thyrotoxicosis worse following death in family. Patient would not submit to spinal or basal metabolism tests.

#### CONCLUSIONS:

(1) Adequately treated syphilis is common.

(2) Cooperation between family physicians is necessary for the correction of same.

(3) Syphilis is "The Great Imitator."

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Thousands of young men are being examined daily for military service and these physical examinations offer the best opportunity this country has ever had to discover a large part of that vast reservoir of unknown, untreated cases of tuberculosis which keeps the White Plague on the march. Routine X-rays for tuberculosis should be given each man called up for selective Service. Thomas Parran, M. D., Surg. Gen., U. S. Pub. Health Service.

## NEWS ITEMS

Drs. Leon L. Solomon and Oscar Bloch, Louisville, who have served on the Jewish Hospital staff since the founding of the institution in 1902, were honored Tuesday, September 16, 1941, at the regular hospital staff meeting. Both men observed their 70th birthdays in the last month. Dr. Joseph M. Frehling gave the testimonial and Dr. Solomon responded.

A change in the spelling of the name "Petro-lagar" to "Petrogal" has been announced by the Petrolager Laboratories. The change is being made in both the product name and corporate name.

Company officials, while pointing out that the adoption of the new spelling does not affect the formula or quality of the product in any way, said that they considered the change advisable to avoid any possible misconception as to the nature of the product.

Officials emphasized that no change has been made in the size of the package, price, or formulae and that each of the five different types of the product will carry the new spelling "Petrogal."

The following programs from the files of the Kentucky State Medical Association are missing and if any doctor has any of these we will appreciate it if he will give them to the Association. The programs that we desire are as follows: 1903, 1905, 1911, 1914 and 1930.

The following laboratories have been added to the list of approved laboratories published in the August, 1941 issue of the Journal.

The name of the city, Director and Laboratory are as follows.

Covington, Meyer S. Jolson, M. D., Meyer S. Jolson, M. D. Laboratory.

Fort Thomas, Fort Thomas Military Post, Station Hospital.

Hartford, M. O. Crowder, M. D., Crowder Clinic.

Pewee Valley, John R. Peter, M. D., Pewee Valley Hospital.

Under the auspices of the American Association of Industrial Physicians and Surgeons the American Conference on Industrial Health will hold its second annual meeting on November 5 and 6, 1941 at Chicago Towers, Chicago, Illinois. This organization maintains a public forum for all who are interested in the prevention of disease, injury and disability in industry, and the active supervision and promotion of health in industrial groups. Further information can be secured by writing to H. D. Cloud, 540 Michigan avenue, Chicago.

Dr. Oscar E. Bloch, Jr., who has been in Baltimore, will make his home in Louisville and be engaged in the practice of internal medicine.

Dr. Ambrose H. Witherspoon, age 71, retired physician of Lawrenceburg died August 14th at the Good Samaritan Hospital, Lexington. Dr. Witherspoon before his retirement was an active member of his County Society.

## NOTICE

The regular Quarterly Supplement, The Woman's Auxiliary Section of the Kentucky Medical Journal, is delayed until November.

## BOOK REVIEWS

MANUAL OF METHODS FOR PURE CULTURE STUDY OF BACTERIA. Edited by the Committee on Bacteriological Technic of the Society of American Bacteriologists. Biotech Publications, Geneva, New York. 1936. \$1.25.

This small paper bound volume should be available in every laboratory doing considerable amount of bacteriological work. In it are detailed the best methods which have come to the attention of the eminent members of the committee which has charge of its editing.

To provide for the changes in technic which occur yearly in this rapidly growing branch of medical science, the manual is issued as a series of leaflets each eight to twenty pages in length. By subscribing to a quarterly journal, "Pure Culture Study of Bacteria," for another dollar a year which contains new revisions of the leaflets with each issue, the entire manual can regularly be kept up-to-date.

It must be remembered that the field covered is limited to the methods employed in the pure culture study of bacteria, and the manual is intended to accompany the Descriptive Chart for the Identification of Bacteria.

ROENTGEN TECHNIQUE—By Clyde McNeill, M. D., Louisville, Kentucky. Second Edition. 329 pages and 275 illustrations. Charles C. Thomas, Baltimore, Md., 1941. \$5.50.

In the second edition of this work new material has been added on fluorography, fluoroscopy, cholangiography, laminography, and pineal localization. Several sections have been rewritten and many minor changes have been made.

The book continues to deal chiefly with roentgen anatomy and positioning and relatively slightly with roentgen ray apparatus and exposure technique. The procedures described are also amply illustrated by careful line drawings from actual roentgenograms.

The standard positions are described in such a way that only the single apparatus available in the average laboratory is necessary.



Kentucky Medical Journal

Published Monthly By  
THE KENTUCKY MEDICAL ASSOCIATION  
Incorporated

Entered as second class matter October 22, 1906, at  
the Postoffice at Bowling Green, Ky., under act of  
Congress, March 8, 1879

Subscription Price .....\$5.00  
Edited Under the Supervision of the Council

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NEXT MEETING MURRAY

COUNTY SOCIETY REPORTS

**Boyd:** The September meeting of the Boyd County Medical Society was dedicated to Dr. J. M. Salmon because he has withdrawn from active practice and resigned from the staff of the Kings Daughters Hospital, Ashland. He was elected by unanimous vote to a life-time membership in the Boyd County Medical Society. His farewell paper was sent to the Journal for early publication. Just before the society adjourned, the secretary quoted from his paper as follows: "but far more important than statues of stone and bronze is the inspiration of their example, their challenge to take from their hands the falling torch and carry on."

RICHARD W. GARDNER, Secretary.

**Four-County:** The Four-County Medical Society, represented by physicians and dentists residing in Caldwell, Crittenden, Lyon and Trigg counties, met in quarterly session in Eddyville, Lyon county, on Tuesday night, August 26, 1941, in the Methodist church, and following the offering of thanks by the pastor, Rev. Elmer Ashby, supper was served by the women of the church, after which the meeting was called to order by the president, W. C. Haydon, of Princeton, and the minutes of the previous meeting, held at Marion, Crittenden county, on May 27, 1941, were read and approved and several communications were read by the secretary, but no action was required on any of the communications. Bills against the Society were approved and T. W. Lander, Eddyville dentist, was admitted to membership and paid the annual membership fee of \$5.00. The next meeting of the Society will be held at Cadiz, Trigg county, on the fourth Tuesday night in November 1941, with the Dr. Futrell in charge of the arrangements.

The scientific program consisted of a discussion of "Dysentery" led by L. H. South, Louisville, and "Every Day Surgery" led by Misch Casper, Louisville, and both subjects evoked a free discussion and valuable points were elicited. The following physicians were in attendance; L. H. South, Misch Casper, Louisville; T. Atchison Frazer, Marion; W. F. Stucky, Dawson Springs; W. E. Gary, Hopkinsville; D. J. Travis, C. P. Moseley, Eddyville; T. L. Phillips, Kuttawa; L. L. Washburn, Benton; John Futrell, L. A. Crosley, Elias Futrell, Cadiz; J. G. White, G. E. Hatcher, Cerulean; F. T. Linton, I. Z. Barber, W. C. Haydon, C. B. Walker, B. K. Amos, W. L. Cash, Princeton. The following dentists were in attendance: B. L. Keeney, C. O. Akin, Power Wolfe, C. H. Jagers, Princeton; T. W. Lander, Eddyville; W. J. Gribble, Eddyville druggist; M. L. Withers, Kuttawa druggist; Rev. Elmer Asby, pastor Eddyville Methodist church.

W. L. CASH, Secretary.

**Hopkins:** The Hopkins County Medical Society held its regular monthly meeting at the hospital Thursday evening, September 11. Dr. David L. Salmon presented a paper on "Vertigo." Mr. Raymond Dixon of Outwood was a guest of the Society.

The following members were present: Drs. J. E. Haynes, F. A. Scott, W. H. Garnier, A. F. Finley, R. F. Robinson, M. S. Veal, A. W. Davis, C. R. Morton, M. M. Fowler, J. R. Corum, W. L. Morse, I. J. Townes.

The next meeting will be held October 9.

WILLIAM H. GARNIER, Secretary.

**Jefferson:** The 832nd stated meeting of the Jefferson County Medical Society was held Monday evening, September 15, with 63 members present.

The President called the meeting to order at 8:07 P. M.

The Secretary read the minutes of the last meeting and they were approved as read.

The Secretary read three applications for employment which will be posted on the bulletin board.

The Secretary read a letter from the National Society for Crippled Children of the U. S. A., Inc. urging the members of this Society to attend the annual convention in Louisville, October 5-8.

The President asked for reports of standing committees for the State Medical Association meeting.

Ely H. Smith asked for the use of more automobiles for the Woman's Auxiliary.

J. Duffy Hancock of the Finance Committee outlined needs for funds and urged each doctor to give his donation when the members of the committee contact him. The expenses cover luncheon for Woman's Auxiliary, refreshments and entertainment Tuesday night, music and flowers for the subscription dinner. There is a ten dollar top on contributions.

B. W. Smock of the Entertainment Committee called attention to the smoker and reception Tuesday for the guest speakers. This is free to the profession. The only cost for the dinner Wednesday night is for food; the entertainment is taken care of by subscriptions.

New members elected are: Wm. J. Coyle, J. B. Marshall, Irving B. Perlstein, and Carl L. Wheeler, Jr.

Hugh R. Leavell spoke briefly about industrial hygiene surveys to determine type of program in this field and also about the problem of nutrition. He made a motion that a committee for industrial hygiene and a committee for nutrition be appointed to help the campaigns in these two fields. Motion seconded by Dr. Oscar Bloch and passed.

Scientific Program: 8:20 P. M. Newer Application of Peritoneoscopy and a New Instrument to Aid the Procedure. (Illustrated Case Reports.) Joseph E. Hamilton, M. D.

Discussed by Doctors Laman A. Gray and W. O. Johnson with closing remarks by Dr. Hamilton.

Cineplastic Amputation of Right Arm. (Motion pictures.) Alice L. Wakefield, M. D.

Discussed by Drs. R. A. Griswold and E. E. Landis with closing remarks by the essayist.

Meeting adjourned at 9:25 P. M.

B. W. SMOCK, Secretary.

**Madison:** The regular meeting of the Madison County Medical Society was held at the U. S. Trachoma Hospital Thursday evening, September 18, at 7:30 P. M.

Dr. Wilson Dodd, President, presided with the following members present: Drs. Kenneth W. Wright, J. W. Armstrong, J. D. Farris, Wilson Dodd, Albert Cornelius, Robert Sory, Hugh Mahaffey, Max E. Blue, and Robert L. Rice. Visitors present were: Drs. C. B. Crittenden and Louise Hutchins.

The meeting was called to order by the president and the minutes of the previous meeting were read and approved.

New Business: Dr. Robert Sory was elected alternate delegate to the Kentucky State Medical Convention by a unanimous vote.

Scientific Session: Dr. Max E. Blue introduced Dr. C. B. Crittenden, who gave a very interesting talk entitled, "The Physician." Meeting adjourned at 8:45 P. M.

ROBERT L. RICE, Secretary.

**Pulaski:** Whereas, death has taken from us Dr. Wm. Price, Dabney, a loyal and honored member of our profession.

Therefore, be it resolved: That in his passing this county has lost a most worthy and useful citizen, the community in which he served, a wise counselor and benefactor, our Society, of which he has been many times President, a loyal and active member. His modesty and sincerity marked him a gentleman of the highest type.

That we extend our deepest sympathy to the bereaved widow and brother, that we too, grieve with them in the loss of this good man, our esteemed co-worker and friend.

That a copy of these resolutions be spread upon the records of the Pulaski County Medical Society—that a copy be sent to the widow, brother, and the Journal.

CARL NORFLEET, Ch'm.  
BRENT WEDDLE  
C. L. WADDLE.



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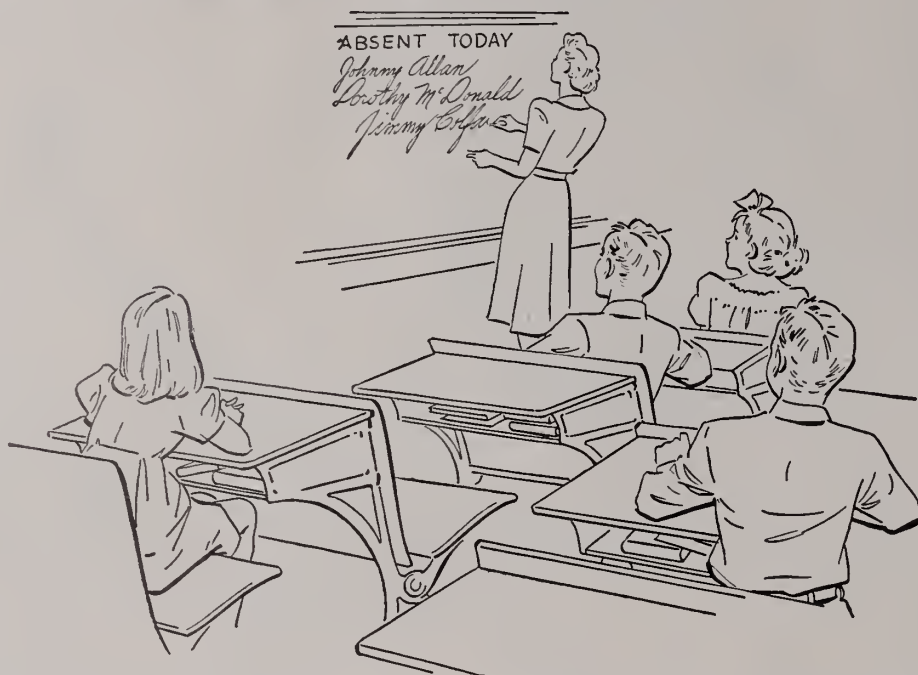
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BOWLING GREEN, KY.

NOVEMBER, 1941

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph., Gon. & Ven. Dis.*, 23, 201 (March), 1939.

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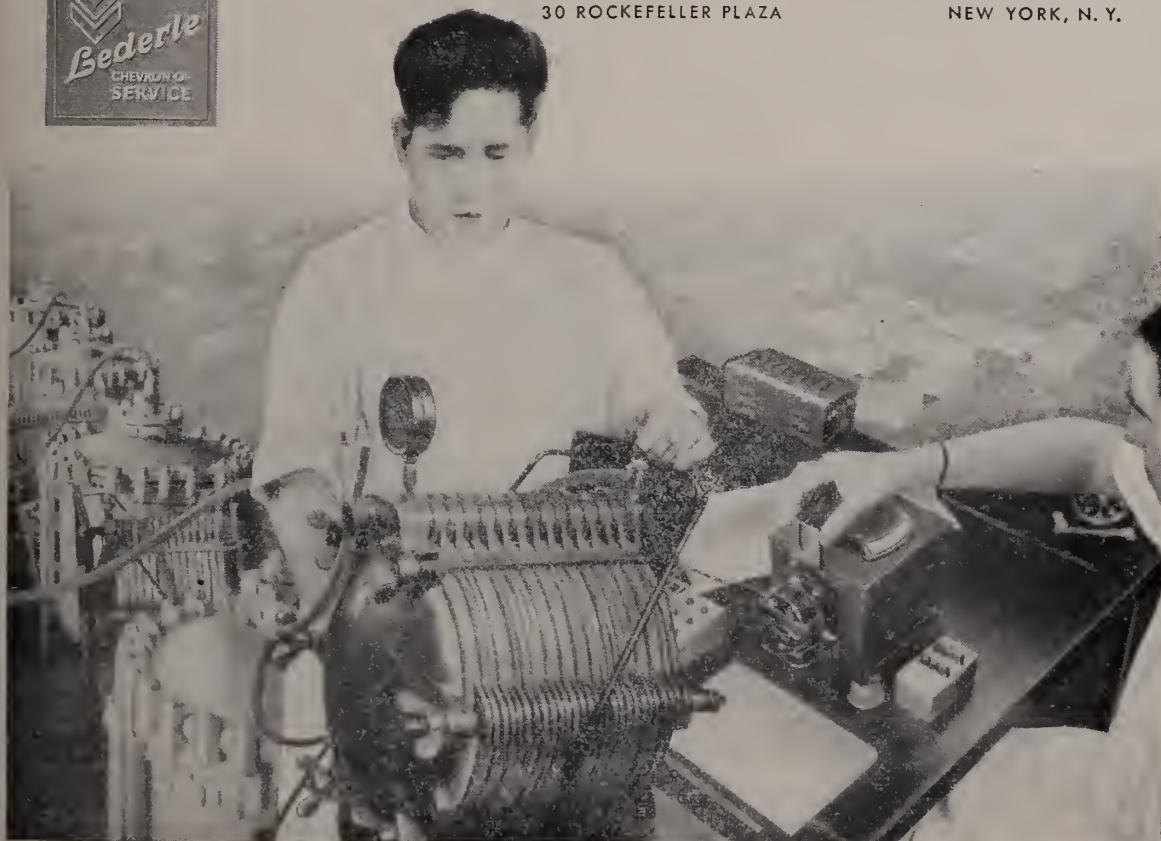
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Ballard.....	F. H. Russell.....	Wickliffe.....	
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Breathitt.....	M. E. Hoge.....	Jackson.....	November 18
Breckinridge.....	John E. Kincheloe.....	Hardinsburg.....	
Bullitt.....	George B. Hill.....	Mt. Washington.....	
Butler.....	D. G. Miller, Jr.....	Morgantown.....	November 5
Caldwell.....	W. L. Cash.....	Princeton.....	November 4
Calloway.....	J. A. Outland.....	Murray.....	November 6
Campbell-Kenton.....	W. V. Pierce.....	Covington.....	November 6
Carlisle.....	E. E. Smith.....	Bardwell.....	November 4
Carroll.....	H. Carl Boylen.....	Carrollton.....	
Carter.....	Don E. Wilder.....	Grayson.....	November 11
Casey.....	Wm. J. Sweeney.....	Liberty.....	November 27
Christian.....	Geo. E. Pryor.....	Hopkinsville.....	November 18
Clark.....	Robert E. Strode.....	Winchester.....	November 21
Clay.....	L. H. Wagers.....	Manchester.....	
Clinton.....	S. F. Stephenson.....	Albany.....	November 15
Crittenden.....	C. G. Moreland.....	Marion.....	November 10
Cumberland.....	W. Fayette Owsley.....	Burkesville.....	November 5
Daviess.....	T. H. Milton.....	Owensboro.....	November 11 & 25
Elliott.....	W. H. Joyner (Acting).....	Sandy Hook.....	
Estill.....	Virginia Wallace.....	Irvine.....	November 12
Fayette.....	Douglas E. Scott.....	Lexington.....	November 11
Fleming.....	Roy Orsborn.....	Flemingsburg.....	November 12
Floyd.....	Robert Sirkle.....	Prestonsburg.....	November 26
Franklin.....	Thomas P. Leonard.....	Frankfort.....	November 6
Fulton.....	M. W. Haws.....	Fulton.....	November 12
Gallatin.....			November 20
Garrard.....	J. E. Edwards.....	Lancaster.....	November 20
Grant.....			November 19
Graves.....	H. H. Hunt.....	Mayfield.....	November 4
Grayson.....			
Green.....	S. J. Simmons.....	Greensburg.....	November 3
Greenup.....	Paul Holbrook.....	Greenup.....	November 14
Hancock.....	F. M. Griffin.....	Hawesville.....	November 3
Hardin.....	D. E. McClure.....	Elizabethtown.....	November 13
Harlan.....	W. E. Riley.....	Harlan.....	November 15
Harrison.....	W. B. Moore.....	Cynthiana.....	November 3
Hart.....	Maher Speevack.....	Munfordville.....	November 4
Henderson.....	J. Leland Tanner.....	Henderson.....	November 11 & 25
Henry.....	Owen Carroll.....	New Castle.....	November 13
Hickman.....	H. E. Titsworth.....	Clinton.....	November 6
Hopkins.....	Wm. H. Garnier.....	Madisonville.....	November 13
Jackson.....			November 1
Jefferson.....	B. W. Smock.....	Louisville.....	November 3 & 17
Jessamine.....	J. A. VanArsdall.....	Nicholasville.....	November 20
Johnson.....	A. D. Slone.....	Paintsville.....	November 24
Knott.....			
Knox.....	T. R. Davies.....	Barbourville.....	November 20
Larue.....			
Laurel.....	Oscar D. Brock.....	London.....	November 12
Lawrence.....	L. S. Hayes.....	Louisa.....	November 17
Lee.....	A. B. Hoskins.....	Beattyville.....	November 8
Leslie.....	John H. Kooser—(Acting).....	Hyden.....	
Letcher.....	Francis D. Willey.....	Jenkins.....	November 25
Lewis.....			November 17
Lincoln.....	Lewis J. Jones.....	Hustonville.....	November 21
Livingston.....	J. O. Nall.....	Smithland.....	
Logan.....	E. M. Thompson.....	Russellville.....	
Lyon.....	H. H. Woodson.....	Eddyville.....	November 4
McCracken.....	Leon Higdon.....	Paducah.....	November 26
McCreary.....	R. M. Smith.....	Stearns.....	November 3
McLean.....	Allen R. Will.....	Calhoun.....	November 13
Madison.....	Robert L. Rice.....	Richmond.....	November 20
Magoffin.....			
Marion.....	W. E. Oldham.....	Lebanon.....	November 25
Marshall.....	S. L. Henson.....	Benton.....	November 19

COUNTY	SECRETARY	RESIDENCE	DATE
Mason.....	C. W. Christine.....	Maysville.....	November 12
Meade.....	S. H. Stith.....	Brandenburg.....	November 27
Menifee.....	E. T. Riley.....	Frenchburg.....	
Mercer.....	J. Tom Price.....	Harrodsburg.....	November 11
Metcalfe.....	E. S. Dunham.....	Edmonton.....	
Monroe.....	George E. Bushong.....	Tompkinsville.....	
Montgomery.....	D. H. Bush.....	Mt. Sterling.....	November 11
Morgan.....			
Muhlenberg.....	E. L. Gates.....	Greenville.....	November 11
Nelson.....	R. H. Greenwell.....	Bardstown.....	
Nicholas.....	T. P. Scott.....	Carlisle.....	November 17
Ohio.....	Oscar Allen.....	McHenry.....	November 5
Oldham.....			November 4
Owen.....	K. S. McBee.....	Owenton.....	November 6
Owsley.....	W. H. Gibson.....	Booneville.....	November 3
Perry.....	Lewis C. Coleman.....	Hazard.....	November 10
Pike.....	F. H. Hodges.....	Pikeville.....	November 4
Powell.....	I. W. Johnson.....	Stanton.....	November 3
Pulaski.....	M. C. Spradlin.....	Somerset.....	November 13
Robertson.....			
Rockcastle.....	Lee Chestnut.....	Mt. Vernon.....	November 7
Rowan.....	A. W. Adkins.....	Morehead.....	November 10
Russell.....	J. R. Popplewell.....	Jamestown.....	November 10
Scott.....	A. Y. Covington.....	Georgetown.....	November 6
Shelby.....	C. C. Risk.....	Shelbyville.....	November 20
Simpson.....	L. R. Wilson.....	Franklin.....	November 11
Spencer.....			
Taylor.....	W. B. Atkinson.....	Campbellsville.....	November 6
Todd.....	B. E. Boone, Jr.....	Elkton.....	November 5
Trigg.....	Elias Futrell.....	Cadiz.....	
Trimble.....			
Union.....	Bruce Underwood.....	Morganfield.....	November 4
Warren-Edmonson.....	W. O. Carson.....	Bowling Green.....	November 12
Washington.....	J. H. Hopper.....	Willisburg.....	November 19
Wayne.....	Frank L. Duncan.....	Monticello.....	
Wehster.....	C. M. Smith.....	Dixon.....	November 28
Whitley.....	C. A. Moss.....	Williamsburg.....	November 6
Wolfe.....			November 3
Woodford.....	Geo. H. Gregory.....	Versailles.....	November 6

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AND  
MENTAL DISEASES



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## AGE—TWO WEEKS

Milk.....10 ozs.  
Water.....10 ozs.  
Karo syrup..... 2 tbs.  
3 ozs. every 4 hrs.—6 feedings

## AGE—ONE MONTH

Milk.....12 ozs.  
Water.....13 ozs.  
Karo syrup..... 2½ tbs.  
4 ozs. every 4 hrs.—6 feedings

## AGE—TWO MONTHS

Milk.....15 ozs.  
Water.....13 ozs.  
Karo syrup..... 3 tbs.  
4½ ozs. every 4 hrs.—6 feedings

## AGE—THREE MONTHS

Milk.....17 ozs.  
Water..... 9 ozs.  
Karo syrup..... 3 tbs.  
5 ozs. every 4 hrs.—5 feedings

## AGE—FOUR MONTHS

Milk.....20 ozs.  
Water.....11 ozs.  
Karo syrup..... 3½ tbs.  
6 ozs. every 4 hrs.—5 feedings

## AGE—FIVE MONTHS

Milk.....23 ozs.  
Water.....11 ozs.  
Karo syrup..... 4 tbs.  
6½ ozs. every 4 hrs.—5 feedings

## AGE—SIX MONTHS

Milk.....26 ozs.  
Water.....10 ozs.  
Karo syrup..... 4 tbs.  
7 ozs. every 4 hrs.—5 feedings

*The amount of Karo in each formula is optional. During the summer, it may be reduced according to the baby's digestive reaction.*



**A** FORMULA of whole cow's milk, carbohydrate and water may be calculated for the individual infant according to the following requisites:

(1) The amount of cow's milk necessary will be 1.5 to 2.0 ounces per pound (100 to 130 cc per kilo) of expected body weight per day; or, one-half to two-thirds of the total calories required for the infant.

(2) The amount of added Karo syrup required will be about one-tenth of the quantity of milk used, i.e., 0.15 to 0.2 ounces per pound (0.1 to 1.13 grams per kilo) of expected body weight per day, or one-third to one-half the total calories required for the infant.

(3) The total caloric value of the formula should be approximately 50 to 55 calories per pound (110 to 115 calories per kilo) of body weight per day.

(4) The amount of water added to the formula will be two to three ounces per pound (130 to 200 cc per kilo) of body weight per day; and the amount of water added to the formula for the 24-hour period depends upon the degree of dilution required to render the mixture digestible.

(5) The amount of formula offered at a feeding during the first few months is expressed by the rule—Age in months plus two ounces at four-hour intervals."

KUGELMASS: "Newer Nutrition in Pediatric Practice." 1940.

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**17 Battery Place, New York City**

**"SEE YOUR DOCTOR!"** Reproduced below is Number 171 of a series of full-page advertisements published by Parke, Davis & Co. in the interest of the medical profession. This "See Your Doctor" campaign has been running in *The Saturday Evening Post* and other leading magazines for thirteen years.



## The man who nearly died . . . from a few kind words

**B**YOND THAT DOOR lies a very sick man. True, his doctor says he is going to pull through. But he has come mighty close to paying a tragic price for a few words of free advice from a well-meaning friend.

When he complained of a nagging pain in his abdomen, his friend said: "You've probably eaten something that's poisoned you. Here's what I'd do . . ."

So he promptly followed his friend's suggestion and took a cathartic. And in a matter of hours he was being rushed by ambulance to the hospital . . . with a ruptured appendix.

His friend, of course, had acted from the kindest of motives. But he didn't know that an abdominal pain might mean acute appendicitis, in which case a cathartic should never be taken.

Unfortunately, appendicitis is only one of many illnesses where amateur medical advice can result in tragedy. Yet, human nature being what it is, many people just can't resist the temptation to offer advice when a friend is sick.

Intelligent medical treatment depends upon various factors which only a physician is qualified to evaluate. When something

seems wrong with you, it is the part of wisdom to observe this common-sense rule: Take a friend's advice about buying a radio, a car, or even a home if you wish; but don't let him advise you about your health.

Don't let a friend who *means* well tell you how to *get* well. To get well, and *keep* well, the man to see is your physician.

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**R. B. DAVIS COMPANY**  
**HOBOKEN NEW JERSEY**

1 Elvehjem, C. A. — *Nutritional Requirements of Man* — Ind. & Eng. Chem., June 1941.

2 McCollum, E. V. — *The Newer Knowledge of Nutrition* — 5th Ed., 1939, p. 392.

3 Mclester, J. S. — *Nutrition and Diet in Health & Disease* — 3rd Ed., 1939, p. 91.

4 McCollum, E. V. — *The Newer Knowledge of Nutrition* — 5th Ed., 1939, p. 320.



*Treatment of disease,  
to a great extent, is  
built on confidence.  
The patient believes  
in the competence of  
his physician, and  
the doctor, in turn,  
relies upon the com-  
pany whose products  
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# ELI LILLY AND COMPANY



# KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

VOL. 39, No. 11

BOWLING GREEN, KY.

NOVEMBER, 1941

## THE ANNUAL MEETING

In this issue of the Journal we publish the complete minutes of one of the most interesting and instructive meetings in the history of our Association. It is essential for every physician interested in the welfare of either the people or the medical profession to read every word of these Proceedings. We would especially impress upon them the report of the Council, which is a restatement of the profession's articles of faith and its method of obtaining its objectives. It is also of the utmost importance for the members to read the report of the Committee on Medical Economics and that of the Committee on Public Relations. These state our immediate objectives. When you have read them, talk about them, not only to your representatives and senators, but explain to their influential friends the reason for the proposed new pure food, drug and cosmetic law, and for the proposed hospital registration law which will protect and develop, especially the small hospital, and the definite purpose of the profession to eradicate tuberculosis. In the report of the Committee on Mental Health, you will find we are really accomplishing purposes set forth by the profession for the mentally ill.

For the second time since the Association was organized in 1851, more than one-half of the practicing physicians in the state were present at the meeting. Reports of the Councilors and the delegates from the county societies showed continuing and renewed interest in the solution of local problems. There is no possibility of progress in Public Health and medical care in any county that does not hold regular meetings of its own county society and own county board of health. It is important to remember that our profession has won public confidence because we have earned it and we can continue to hold it so long as we are worthy of it. And we will be worthy of it so long as every member of the profession keeps himself informed of the details of its organization, which is under his and his fellow practitioners' control.

## OUTSTANDING

The hit of the Atlantic City meeting of the American Public Health Association was made by Dr. Robert D. Higgins, Health Officer of Boyd County. A rather learned discussion by distinguished leaders in the public health field had told about what is to be attained in the immediate future. Dr. Higgins electrified his audience by telling them that all these things have already been done in the better county health departments in Kentucky in the past fifteen years. His discussion was sparkling with good humor, kindness and stimulation. The applause which recognized his contribution was as great as any that occurred during the entire session. Kentucky may well be proud of such a physician and health officer as Dr. Higgins.

## CONGRATULATIONS, DR. FREEMAN

His many friends in Kentucky will be happy to know that Dr. A. W. Freeman, Professor of Public Health Administration, Johns Hopkins University, was made President-elect of the American Public Health Association, at its recent session in Atlantic City.

Doctor Freeman is an honorary life member of our Association and delivered a notable address before it many years ago. He was in charge of the Summer Course in Public Health of the University of Kentucky for many years, and much of the excellent work of our health departments has been due to his wise leadership.

Doctor Freeman has been Assistant State Health Commissioner of Virginia; Health Commissioner of Ohio, and was a Colonel in the Army during the first World War. His peculiar personal magnetism, his clarity of vision and expression, his courage and honesty, have endeared him to everyone who knows him.

During his connection with Johns Hopkins he probably came in contact with more foreign health officials representing almost every foreign country in the world. The Association is to be congratulated on the selection of such a fine representative of public health.

MINUTES OF THE NINETY-FIRST ANNUAL  
SCIENTIFIC SESSION OF THE KENTUCKY  
STATE MEDICAL ASSOCIATION HELD AT  
LOUISVILLE, SEPTEMBER 29-OCTOBER  
2, 1941

SCIENTIFIC SESSION

Tuesday Morning, September, 30

The opening session of the Ninety-First Annual Meeting of the Kentucky State Medical Association, designated as the William Talbot Owen Memorial Meeting, and held in the Brown Hotel, Louisville, September 29-October 2, 1941, was called to order at 9:00 o'clock a. m., W. E. Gary, Hopkinsville, President of the Association, presiding.

PRESIDENT GARY: The meeting will please come to order. The invocation will be given by the Reverend H. W. Tribble, of the Southern Baptist Theological Seminary, Louisville.

REVEREND H. W. TRIBBLE: Our Father and our God, we thank Thee for all of the gifts and blessings and beauties of life. We thank Thee for our country, for the privileges that are ours to pursue our chosen profession with freedom. We thank Thee for the task that Thou hast given to these who are gathered here today, for these special sessions of discussion and inquiry and fellowship. We thank Thee for the ministry to the bodies and the minds and the total personalities of our fellowmen.

And now we invoke Thy blessings upon this meeting, that the minds of these who speak and think together may be clear, that their hearts and consciences may be right with Thee and right with the moral purpose and order of our universe. May the cause of health and happiness be advanced through these sessions, and may everyone who participates in these meetings be conscious of a call to a high service for the glory of God and for the welfare of man. We ask it all in the name of the Great Physician, Jesus Christ, our Savoir. Amen.

PRESIDENT GARY: At this time I wish to thank all members of the committee and all members of the staff who have worked so unceasingly to make this a successful year. You who were here yesterday to hear the reading of these reports will agree with me that they represent a great work and that some progress has been made in the work this last year.

This year has also been a tragic year to us, in that we lost one of our best men, Austin Bell. His loss was a great

one to the society, to the community, and to me personally, as he was one of my best personal friends of long standing. He died, I believe, in this room, as he would like to have done, attending to affairs of the association. He was about to address a meeting of the Hospital Association on the question of the nursing problem that we have in Kentucky at the present time. He was very anxious to see that the rural communities and small towns of the state are relieved of the distressing situation they are now facing in that they cannot obtain nurses.

In his memory I am going to ask that the members stand for a moment.

The members rose and stood in silent tribute to the memory of Austin Bell.

PRESIDENT GARY: As presiding officer, the last portion of this term does not fall to my lot, for which I am very grateful, and you are to be congratulated that I am not to make a set speech to you.

You have a very full program and one that will be very entertaining, and I think we should at this time go into it.

It is going to be my pleasure to introduce to you your incoming President, a man with whom I have been pleasantly associated since our days in the old Jefferson County Society, and it is a double pleasure for me personally to introduce Dr. Elmer Henderson as your new President. (Applause.)

Elmer L. Henderson, Louisville, took the Chair.

PRESIDENT HENDERSON: Dr. Gary, Members of the Kentucky State Medical Association, Distinguished Guests: I did not have the pleasure last year, at the time you saw fit to make me President-Elect of your organization, to be present to thank you. I was out of the state at the time; however, I was working for the profession. Therefore, I wish to express to you my sincere appreciation for the great honor and confidence that you have conferred upon me. I hope during the coming year there will be complete understanding and unity among our members.

In accepting this office, I am not unmindful of the obligation carried with it, and I shall strive to do my very best to serve each and every one of you to the best of my ability.

I am not going to attempt to make a speech to you this morning. We have a rather crowded program and we are going to get under way immediately.

Next on the program is the report of



the Chairman of the Committee on Arrangements, M. J. Henry.

M. J. HENRY, Louisville: I have a very short report to make because I have asked Dr. Smock, who is Chairman of the Committee on Entertainment, to speak in my stead. I think it was Mr. Schwab who once said a good executive is a man who can go away from his business for a year and come back and find it better than when he left. Consequently one of the things to do in being chairman of a committee of arrangements is to get a good group working, and I think we have had an excellent group. Unfortunately, one of the chairmen could not come, so I am going to read his report. It is about golf. Many men come to medical societies for scientific purposes; a few come for scientific purposes and golf. So Dr. Spurling, who is Chairman of the Golf Committee, has asked me to read this.

Golf can be played on Tuesday and Wednesday at the Louisville Country Club. Every player is supposed to post his handicap and his scores at the caddy house. The greens fee will be paid by the Jefferson County Medical Society. Prizes will be given for the low gross and the runner-up, and there will also be a prize for the low handicap runner-up. Prizes will be distributed sometime at the banquet on Wednesday evening.

I shall now ask Dr. Smock to give a report on the entertainments to be had during your stay in Louisville. I might say that the Jefferson County Society, as usual, is happy to be your host once more. (Applause.)

B. W. Smock, Louisville: The President of our Society has told you about a good executive; he should have told you that an excellent executive has only privates in the ranks. We are all very loyal to our President and we have worked hard for him because he has been one of the outstanding Presidents of the Jefferson County Medical Society. A number of the arrangements for this meeting have been his ideas, and we have merely put into execution his plan for this meeting. I know that it will be a success because he has given a great deal of thought as well as hard work to it.

Your entertainment program consists of quite a few various activities. There is one misprint in the bulletin which I am very anxious to correct, and that is that the luncheon today for the ladies of the State Medical Association is not a sub-

scription luncheon but a free luncheon. They are to be the guests of the Jefferson County Medical Society. This not only is for the members of the Woman's Auxiliary, but for all women associated or connected in any way whatsoever with the medical profession.

There is another misprint in the bulletin, which states that tomorrow's luncheon at the Brown Hotel is a subscription luncheon. This is not true.

SECRETARY McCORMACK: You are mistaken about that. The Association gives the luncheon tomorrow and makes a regulation in regard to it. It is given for the members of the Auxiliary. If any guests come in there they pay, because we are trying to build up membership in the Auxiliary, and the Jefferson County Medical Society can't interfere with that arrangement.

B. W. Smock: Mr. Secretary, I am being governed entirely by the word of the gentleman who holds the purse-strings and he tells me that he is willing to pay for the luncheon tomorrow out of the funds of the Jefferson County Medical Society, for all members of the Auxiliary.

SECRETARY McCORMACK: It is all right for him to be willing but he can't do it.

B. W. Smock: Dr. Hancock's generosity apparently, will not be accepted.

This evening we have, I think, one of the outstanding programs that has ever been presented to the State Medical Association. We have the honor, this evening, of the presence of the Governor of the Commonwealth of Kentucky, who will address you, followed by Dr. Curtis, and then by the President-Elect of the American Medical Association. The President of your Association will preside at that meeting. The meeting is to take place in this room at eight o'clock this evening. Immediately following the adjournment of the meeting, you will retire to the Roof Garden of this hotel, where there will be held a smoker and reception for the guest speakers. This meeting is open to all people associated and affiliated with the Kentucky State Medical Association.

We have arranged a program of entertainment, with quite a number of vaudeville acts; we will have refreshments, and we have tobacco in all of its forms. We hope that you will come upstairs and join with us this evening following the speeches downstairs.

Tomorrow evening at 6:30 there will be a banquet. The Annual Dinner will be held in this the Crystal Ball Room of

the Brown Hotel. This, as in years past, is known as the President's dinner. This year we not only are honoring the President of our own Association, but the President-Elect of the American Medical Association, Fred Rankin, of Lexington, a very close and particular friend of all the doctors of Kentucky. We hope that we shall have a large attendance, and we believe that you will find a very lovely meal and a most pleasant and interesting evening awaiting you.

At the conclusion of the banquet there will be a dance which will start at ten o'clock and close at the will of those attending. We have a good orchestra. If you don't dance you will enjoy watching the crowd, associating with your friends from different sections of the state, and partaking of the refreshments which will be served at midnight.

I hope that our plans meet with your approval and that you enter into the spirit of the occasion.

The following papers were presented:

Suppurative Diseases of the Lung, by Lawrence W. Nehil, Louisville; discussed by Oscar O. Miller, Louisville; John W. Scott, Lexington; closing discussion by Lawrence W. Nehil, Louisville.

Pulmonary Tuberculosis Simulating Non-Tuberculous Lesions, by E. R. Gernert, Louisville; discussed by L. O. Toomey, Bowling Green; C. W. Dowden, Jr., Louisville; Lillian South, Louisville; closing discussion by E. R. Gernert, Louisville.

Our Dental Problems, by A. P. Williams, Louisville; discussed by R. Emerson Smith, Henderson; Major William N. Lipscomb, State Medical Officer, Kentucky Selective Service Headquarters; closing discussion by A. P. Williams, Louisville.

Treatment of Traumatic Injuries of the Face, by E. C. Hume, Louisville; discussed by M. J. Henry, Louisville; T. A. Frazer, Marion; closing discussion by E. C. Hume, Louisville.

The Management of Primary Dysmenorrhea, with Special Consideration of the Anatomy and Surgical Technic, by Arthur H. Curtis, Chicago; discussed by W. O. Johnson, Louisville; closing discussion by Arthur H. Curtis, Chicago.

The Oration in Surgery, Changes in the Surgical Treatment of Peptic Ulcer, was given by Guy Aud, Louisville.

The meeting recessed at 12:30 p. m.

## SCIENTIFIC SESSION

Tuesday Afternoon, September 30

The meeting was called to order at 2:00 p. m. by President Henderson.

The following papers were presented:

Evolution of the Walking Iron, Turn Buckle and Joint Hinge in Fractures, by Misch Casper, Louisville.

Surgical Diseases of the Spleen, by D. P. Hall, Louisville; discussed by J. Garland Sherrill, Louisville.

Conservative Management of Pelvic Inflammation, by Delmas M. Clardy, Hopkinsville; discussed by Francis M. Massie, Lexington; Arthur Curtis, Chicago; G. Y. Graves, Bowling Green; closing discussion by Delmas M. Clardy, Hopkinsville.

The Problem of Abortion, by Stanley S. Parks, Lexington; discussed by George M. McClure, Danville; John W. Scott, Lexington; Misch Casper, Louisville; Smithfield Keffer, Grayson; closing discussion by Stanley S. Parks, Lexington.

The Diagnosis and Management of Lesions of the Stomach, Duodenum and Jejunum, by Frank H. Lahey, Boston; discussed by Irvin Abell, Louisville; J. Garland Sherrill, Louisville; closing discussion by Frank Lahey, Boston.

The Treatment of Anemia, by Marion F. Beard, Louisville; discussed by E. S. Maxwell, Lexington.

The meeting recessed at 5:00 p. m.

## PUBLIC SESSION

Tuesday Evening, September 30

A public session was held in the Crystal Ball Room of the Brown Hotel on Tuesday evening at 8:10 p. m., and was called to order by B. W. Smock, Louisville, Chairman of the Entertainment Committee, who welcomed the members and guests. A Color Guard advanced the Colors, and the audience stood in silent tribute to the memory of deceased members, while a bugler sounded Taps. Dr. Smock presented the President, E. L. Henderson, Louisville, who presided.

There were addresses by the Honorable Keen Johnson, Governor of Kentucky; Arthur H. Curtis, Chicago, on Unrecognized Features of Gross Pelvic Anatomy as Applied to Gynecological Surgery; and Frank H. Lahey, Boston, on Developments in Medicine, National, Economic and Scientific, who was introduced by Irvin Abell, Louisville.

The meeting adjourned at 10:20 p. m.



## SCIENTIFIC SESSION

Wednesday Morning, October 1

The meeting convened at 9:00 a. m., President Henderson presiding. The following papers were read:

Appendicitis in Kentucky, by J. B. Lukins, Louisville; discussed by E. L. Garrett, Murray; J. Duffy Hancock, Louisville; Woolford Barrow, Lexington; A. T. McCormack, Louisville; closing discussion by J. B. Lukins, Louisville.

Six Thousand Spinal Anesthesias, by C. C. Howard, Glasgow; discussed by Dougal M. Dollar, Louisville; W. O. Carson, Bowling Green; closing discussion by C. C. Howard, Glasgow.

Chemotherapy in Pneumonia, by Alphonse McMahon, St. Louis; discussed by John Walker Moore, Louisville; T. A. Frazer, Marion; closing discussion by Alphonse McMahon, St. Louis.

What Progress Has Been Made in Cancer, by L. Wallace Frank, Louisville; discussed by Malcom Thompson, Louisville, and R. A. Griswold, Louisville.

The Value of Gastric Analysis, by Frank M. Stites, Louisville.

The Oration in Medicine, The Epilepsies, was given by Thornton Scott, Lexington.

The meeting recessed at 12:40 p. m.

## SCIENTIFIC SESSION

Wednesday Afternoon, October 1

The meeting convened at 2:00 p. m., Vice-President Heflin presiding until President Henderson took the Chair.

The following papers were presented:

The Prevalence of Neuroses in General Practice, by J. D. Handley; discussed by H. Halbert Leet, Lexington; A. T. McCormack, Louisville; John W. Scott, Lexington; closing discussion by J. D. Handley, Hodgenville.

Recent Advances in Treatment of Contagious Diseases, by James W. Bruce, Louisville.

Treatment of Biliary Symptoms After Cholecystectomy, by S. C. Smith, Ashland; discussed by Hubert J. Prichard, Catlettsburg; J. Garland Sherrill, Louisville; C. V. Hiestand, Campbellsville; closing discussion by S. C. Smith, Ashland.

Sinusitis and Its Relation to General Systemic Disease, by A. L. Bass, Louisville; discussed by Virgil E. Simpson, Louisville; John D. Williams, Ashland.

Consultations, by Walter I. Hume, Louisville; discussed by C. V. Hiestand, Campbellsville, and Harrison H. Shoulders, Nashville, Tennessee.

Non-Penetrating Wounds of the Heart, by Morris M. Weiss, Louisville; discussed by W. B. Troutman, Louisville; C. H. McGuire, Louisville; closing discussion by Morris M. Weiss, Louisville.

The President introduced Dr. Harrison H. Shoulders, Nashville, Tennessee, Speaker of the House of Delegates of the American Medical Association, and Mr. C. P. Loran, Secretary-Manager of the Southern Medical Association.

The meeting recessed at 4:55 p. m.

## ANNUAL SUBSCRIPTION DINNER

Wednesday Evening, October 1

After the annual subscription dinner, A. T. McCormack, Louisville, called the meeting to order and introduced the distinguished guests.

The President, Elmer L. Henderson, Louisville, delivered the President's address, Responsibilities of Medicine.

Dr. Fred W. Rankin, Lexington, President-Elect of the American Medical Association, spoke on The Medical Profession and Military Preparedness.

Golf prizes were awarded for the Chairman of the Golf Committee, by Albert L. Bass, Louisville, and the meeting adjourned at 9:20 p. m.

## SCIENTIFIC SESSION

Thursday Morning, October 2

The final scientific session convened at 8:15 a. m., President Henderson presiding.

The following papers were read:

The Sphere and Clinical Application of Radiation Therapy, by D. Y. Keith, Louisville; and Advantages of Direct X-ray Therapy, by Jesshill Love, Louisville. These two papers were discussed by P. E. Blackerby, Louisville; J. Duffy Hancock, Louisville; closing discussion by D. Y. Keith, Louisville.

In a Symposium on Selective Service Examinations, the following papers were presented:

Some Observations by the Army Doctor on the Physical and Mental Defects Found in Selective Service Men Sent for Duty at Fort Knox, by Lt. Col. C. D. Holmes, Fort Knox.

Experiences and Impressions of a Rural Examining Physician, by E. S. Dunham, Edmonton.

Draft Board Examinations in 1917-18 and 1940-41, by J. C. Graham, Greensburg.

Experiences of a State Medical Officer, by Major W. N. Lipscomb, Louisville.

The papers in the Symposium were discussed by Lt. Col. Royal C. Grossman, Fort Knox; Major Joe W. Fenn, Tennessee;

Capt. Glen Ward Lee, Indiana; R. Emerson Smith, Henderson; A. T. McCormack, Louisville.

Other papers read were: Early Symptoms of Carcinoma of the Colon and Rectum, by Irvin Abell, Jr., Louisville; discussed by Pat R. Imes, Louisville; R. A. Griswold, Louisville; A. T. McCormack, Louisville; John W. Scott, Lexington; closing discussion by Irvin Abell, Jr., Louisville.

Peritoneoscopy: An Additional Diagnostic Method, by J. Albert Vesper, Jr., Newport; discussed by Joseph E. Hamilton, Louisville; closing discussion by J. Albert Vesper, Jr., Newport.

Management of Acute Middle Ear Infections, by Arthur L. Juers, Louisville; discussed by D. M. Griffith, Owensboro.

The meeting adjourned sine die at 12:20 p. m.

A. T. MCCORMACK, *Secretary.*

MINUTES OF THE NINETY-FIRST ANNUAL  
SESSION OF THE HOUSE OF DELEGATES  
OF THE KENTUCKY STATE MEDICAL  
ASSOCIATION HELD AT LOUISVILLE,  
SEPTEMBER 29 TO OCTOBER  
2, 1941

FIRST SESSION

Monday Afternoon, September 29, 1941

The first session of the House of Delegates at the Ninety-First Annual Meeting of the Kentucky State Medical Association, held September 29, to October 2, 1941, at Louisville, was called to order in the Crystal Ball Room of the Brown Hotel at 2:00 p. m. by the President, W. E. Gary, Hopkinsville.

PRESIDENT GARY: The meeting will please come to order. The first on the program is the report of the Committee on Credentials, by Dr. Guy Aud.

GUY AUD, Louisville: The committee wishes to report that it has examined the list that has been made up and finds it in order. We wish to submit this roll to you.

PRESIDENT GARY: A motion is in order to accept this committee's report.

T. A. FRAZER, Crittenden: I move the acceptance of the report.

The motion was seconded by A. J. Bean, Marshall County, and carried.

PRESIDENT GARY: We will now proceed with the roll call by the Secretary.

The roll was called.

SECRETARY MCCORMACK: I ask unanimous consent that the roll may be interrupted and the House may stand for a moment in silent prayer in memory of Dr.

W. R. Moss, a delegate from Hickman

County, who died four days ago.

The delegates arose and stood in silent tribute to the memory of Dr. W. R. Moss.

SECRETARY MCCORMACK: Mr. President, there are 62 Delegates present. There is a quorum.

PRESIDENT GARY: We will now proceed with the order of business. The next is the reading of the minutes of the 1940 meeting.

C. W. DOWDEN, Louisville: I move that the reading of the minutes be dispensed with.

The motion was seconded by C. A. Vance, Lexington, and carried.

T. A. FRAZER: I move their adoption as published.

The motion was seconded by Dr. Vance, and carried.

SECRETARY MCCORMACK: Mr. President, on the agenda for this afternoon's program the item of unfinished business was not included because there has been, heretofore, no unfinished business, but this year there is a report that was laid over from the last meeting, of change in the Constitution and By-Laws, which is now a privileged motion.

In the last issue of the JOURNAL appeared this: "In accordance with the provision of the Constitution and By-Laws, the following changes which were offered at the Lexington meeting are published so that they may be acted upon at the Louisville session."

The members of the House will recall that at the last session the Committee on Constitution and By-Laws made a report which was tabled. Subsequent to that report, by unanimous consent the committee was permitted to take from the report all those parts of the report to which no objection had been raised and submit them for action at this meeting. No controversial matter was contained in these; they are merely corrections in the By-Laws. The amendments to the Constitution are:

Article VIII, Section 1, amend to read: The Officers of the Association shall be a President, President-Elect, three Vice-Presidents, a Secretary, a Treasurer, and eleven Councilors.

That just includes the President-Elect.

Section 2, amend to read: The President-Elect and the Vice Presidents shall be elected for a term of one year. The Secretary, Treasurer, and the Councilors shall be elected for terms of five years each, Councilors being divided into classes; that two shall be elected each year except for each fifth year when three shall be



elected. All of these officers shall serve until their successors are elected and installed.

Section 3. The Officers of the Association shall be elected by the House of Delegates on the last day of the Annual Session, but no Delegate shall be eligible to any office named in the preceding section except that of Councilor, and no person shall be eligible to any office who has not been a member of the Association for the past two years.

The amendments to the By-Laws are: Chapter I, Section 2. Honorary Members. Any physician possessed of scientific attainments who is a member of a constituent State Medical Association of the American Medical Association, and who has participated in the program of the Scientific Session and who is not a citizen of Kentucky may, by unanimous vote of the House of Delegates, be elected to honorary membership. Honorary members shall be entitled to the privileges of the floor in all scientific sessions.

Then change the numbers of the sections following, making the present Section 1, Section 3; the present Section 2, Section 4; make present Section 3, Section 5; make present Section 4, Section 6.

In Section 1, change the first sentence to read: Section 1. The general meeting shall include all registered members, honorary members and guests who shall have equal rights to participate in the scientific proceedings and discussions.

Add to the By-Laws, Chapter IV, at the end of Section 1, the following paragraph: The House of Delegates may be called into special session by the President with the approval of the Council, and a special session of the House of Delegates shall be called by the President on written request of the Delegates representing fifty or more component county societies. When such special session is called, the Secretary shall mail a notice of the time and place and the purpose of such meeting to the last known address of each member of the House of Delegates at least ten days before such special session.

Chapter IV, Section 8, amend so as to read: It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the constitution and by-laws of that body.

Chapter V, Section 4, amend so as to read: Nominations for President-Elect shall be called for by counties.

Chapter VI, Section 2, add a new sec-

tion defining the duties of the President-Elect: Section 2. The President-Elect shall be the Chairman of the Committee on Scientific Work, and shall appoint one active member of the Association to serve on this Committee. He shall become the President of the Association at the next annual meeting of the Scientific Session following his election as President-Elect. He shall assist the President in visitation of county and other meetings and shall be ex-officio a member of the House of Delegates with the right to vote. In the event of death, resignation, or if he becomes permanently disqualified, his successor shall be elected by the House of Delegates and shall be installed as President of the Association at the next annual meeting of the Scientific Session of the Association.

Present Section 2 is to be made Section 3 and present Section 3, Section 4.

Amend the last paragraph of Section 3 by transferring this paragraph to be the first paragraph of Chapter VII, Section 1, so that the first paragraph of Chapter VII, Section 1 will read as follows: Section 1. The Council shall be the Executive Body of the House of Delegates and between sessions shall exercise the power conferred on the House of Delegates by the Constitution and By-Laws.

Make present Section 4, Section 5.

Chapter VIII, add a new section, Section 6: The Committee on Medical Education shall consist of three members who have been appointed by the President and shall serve for one year. It shall prepare a report covering its activities during the year to be presented to the House of Delegates.

Mr. President, I move that the amendments to the Constitution and By-Laws as printed in the JOURNAL be adopted.

The motion was seconded by Dr. T. A. Frazer, Crittenden County.

PRESIDENT GARY: It is open for discussion. Is there any discussion? The question was called for and the motion was carried unanimously.

SECRETARY McCORMACK: The President will deliver his report at this time.

PRESIDENT GARY: Gentlemen, I have no report to make. As you know, I have only filled out part of the term. I take occasion now, however, to thank you all for the honor you conferred upon me in making me the President of this Association, which is the highest honor, I consider, that any man in Kentucky can have. It fell to me to accept this position because of

the death of Dr. Austin Bell, who was a great personal friend of mine for many years. In him this Society has lost a great friend.

It is with a great deal of pleasure that I have acted these few months as your President, and I appreciate the honor very much. (Applause.) Dr. Vance will give the report of the Council.

#### REPORT OF THE COUNCIL

C. A. VANCE: Members of the House of Delegates of the Kentucky State Medical Association: Following the custom established upon the formation of the Council, we have published in the JOURNAL the report of the public accountant who has audited the accounts of the Secretary and the Treasurer, because every member of the Association and especially every member of the House of Delegates is entitled to know about the business of the Association.

The total income of the JOURNAL this year was \$8,013.26 as contrasted with \$7,680.72 last year and \$7,030.53 of the year before. The cost of the JOURNAL was \$8,013.15 as compared with \$8,151.48 last year and \$7,634.29 of the year before. Our advertising income shows an increase of \$332.54 this year as against an increase of \$650 last year. The advertising income of the JOURNAL is due entirely to the loyalty of the member-readers in giving preference, other things being equal, to the announcements in the advertising pages. Most of our members read the JOURNAL. The value of the scientific articles to the practicing physician is apparent. The patronage of our members makes the JOURNAL of real value to our advertisers. We have continued to reject more pages of advertising than we have accepted because we consider ourselves under moral obligation to accept only announcements from firms and of materials that we can approve.

The Council desires to express its appreciation to the American Medical Association, and especially to the Cooperative Medical Advertising Bureau for its continued campaign for national advertising. We especially desire to thank Messrs. Braun and Sandberg of the parent organization for their constant interest in the JOURNAL.

The receipts from the dues from the county societies this year were \$9,707.50 as compared with \$9,648.34 last year and \$9,249.58 in 1939. The total paid membership for 1941 is 1,855 as against 1,827 enrolled

for the same period last year and 1,765 for the preceding year. It is probable that the total membership will reach 1,950 by the time of this meeting. This indicates a healthy increase in the work of the county societies. The number of meetings of these important organizations has increased by 10 per cent over last year. There has been an even larger increase in the number of physicians present at the meetings held in the several Councilor Districts.

You will notice from the report that we have paid \$87,724.91 on the purchase price of the J. N. McCormack Memorial Health Building in Louisville, which houses the offices of this Association and of the State Department of Health, leaving a balance of \$62,275.09. This transaction has not involved any expenditures on the part of this Association. We have been merely the agent through which the state is paying for the purchase of the property. The Council feels that it is of the utmost importance that both the profession and the public be informed of each step in this transaction.

The McDowell Memorial Fund shows a deficit of \$1,944.31. This deficit was incurred in the purchase of the Doctor's Shop, which adjoins the McDowell Memorial in Danville. This property was promptly deeded to the state, and the Council recommends that this deficit be charged off and that the McDowell Doctor's Shop be considered a gift from this Association to the Commonwealth.

The Council desires to call your attention to the emphasis which has been placed on the educational exhibits for this session. Both the scientific and technical exhibits are the best that we have ever had. We want to express our gratitude both to our own members who have so generously contributed by bringing and sending exhibits and to the commercial firms whose exhibits we have accepted from among a large group of applicants. These exhibits, combined with the splendid scientific program of the meeting, offer a real postgraduate course to the interested medical student.

For seventeen years this Association has cooperated with the State Board of Health in the enforcement of the Medical Practice Act and other health laws for the protection of our people. During each of these years, the House of Delegates has authorized the expenditure of a sum not to exceed \$1200 for this purpose. The Council recommends that this amount be appropriated for next year. It has not been necessary to use any part of this appropri-



tion for the past several years, but it is important that it be available in case an emergency should arise in which it might be needed. We wish to urge the county societies to bring to the immediate attention of the State Board of Health any practice of medicine by unregistered practitioners. Such information should be accompanied by the names of witnesses upon whom these people have practiced, as this expedites the necessary legal procedure.

In this connection we wish to call the attention of the medical staffs of hospitals of the state to the fact that it is a violation of the law to employ graduates of any school which is not recognized as reputable in this state, as interns or for any other positions in the hospital in which physicians are usually employed. Graduates of schools outside of the United States and Canada are not eligible for internships or other employment by hospitals in Kentucky, unless they have passed the examinations of the National Board and have received a certificate of registration making them regular practitioners in Kentucky.

We recommend that an appropriation not to exceed \$1200, which has been made for the expenses of the Committee on Public Relations for several years, be continued for next year. Of that amount appropriated last year, \$360 was expended, and it is hoped that an additional saving will be made this coming year.

For several years the House of Delegates has appropriated a sum not to exceed \$500 as a reserve fund for the Woman's Auxiliary and the publication of its Quarterly Supplement to the JOURNAL. The only expenditure from this fund has been for the annual luncheon given to the members of the Auxiliary, as the Supplement has been a self-supporting project from the beginning. The American Medical Association is emphasizing the constantly increasing importance of the Auxiliary, particularly in its public relations work. The Council regrets that many counties in Kentucky have not yet made the necessary effort to organize the intelligent women who know most about us and can best interpret us to a public which needs information in regard to our profession.

The profession of the state must understand and must teach the people that it is responsible for the health administration of the Commonwealth. The State Board of Health is really selected by this organization of experts, and it is up to us as a responsible body to continue to nominate

physicians of the highest character like those who have heretofore composed this Board. The thoughtless or the designing sometimes criticize this Association and the State Board of Health because they have built up strong alliances with the State Federated Women's Clubs, with the Bar Association, the Parent-Teachers' Association, the Kentucky Educational Association, the Press Association, the State Farm Bureau, the Grange, the Society of Equity, the Kentucky State Dental Association, the Red Cross, the Tuberculosis Association, the State Welfare Agencies, the Federation of Labor, the Pharmaceutical Association, and all of the other state agencies interested in the health and welfare of the people. It seems absurd, but the members of the General Assembly have been warned not to take the advice of members of these great organizations in regard to legislation. We point with pride to the support we have received in the past from these great bodies. We have earned it by our constant labors for the people of the state. Unlike other baseless charges launched by the interested few who have attacked the medical organization of Kentucky, this charge is true. We plead guilty and we are delighted that we have, as we have tried to earn, the support of every well wisher of Kentucky and her people.

Now is the time for a revival of interest, with the purpose of considering not only the advances in scientific medicine, especially in internal medicine, in the special branches of surgery, including roentgenology, and in early diagnosis; but also all the complex medico-sociologic questions arising as a result of the removal of physicians from the country to the city due to the too rapid raising of the standards of education and the reduction of both opportunity and income of physicians in many sections. In addition, the necessity for recognition of the already patent fact that preventive medicine will demand that a much greater number of physicians be trained, must be emphasized.

While the total number of members of the State Association varies so little from year to year, a study of the society history of either counties or individuals shows that although the membership of about ninety per cent of the profession in most counties, and in the state as a whole, is permanent, with their names always on the rolls and each to be depended upon to do his or her part of any duty, the balance, to a per cent which so far as the history of our organization goes, can be counted on

with equal confidence to drift in and out of their societies in such a way as to maintain the annual average in a way that is likely to mislead and cause those conducting the organization work to overlook this important element, and fail in their duty to it. While the individuals composing this drifting class, good men as a rule, are out of the societies, often two years in three, they do not receive the JOURNAL or otherwise keep in touch with professional affairs and advances, are not entitled to reciprocity with other states, to appointments as members of county or city boards of health or as insurance examiners, and are not protected against malpractice suits; in a word, get none of the benefits of the county, state or national organization so prized by most of us, and, in consequence, in a great measure become the unsuccessful and disgruntled minority so important to reach and deal with for their own and the profession's welfare, and still more for the safety of the people dependent upon them as family physicians.

That those who framed our plan of organization fully appreciated these dangers in advance and made every possible provision against them will be readily shown by such a study of the various constitutions and by-laws of the entire system, from the county societies up to the American Medical Association, as everyone should give them who desire to take an intelligent part in this work. In fact, it will be found that under the existing order of things one of the chief functions of the higher organizations, within their respective spheres, was, and is, to maintain and act as a bond of union between the county societies. One of their principal uses and powers through the well-devised delegate and councilor system is to collect and concentrate the influence and represent the opinion of a united profession, as developed and expressed in the county societies, on all the great questions relating to the educational and scientific advancement of the profession itself, or for the protection and promotion of the public health interests of the whole people. Through the same system they may be made equally efficient in radiating and diffusing the spirit of scientific investigation, and the generous emulation and mutual respect and forbearance engendered by the contact of the most advanced and liberal members gathered at the annual meetings, back through the system of delegates and organizations to the most remote societies. Through such action and reaction

of enlightening and ennobling influences, and the systematic supervision provided through the councilors for every county in the state, aided by the JOURNAL sent free to all members, all possible safeguards are made for the permanency and efficiency of these organizations, in theory. With such incentives, instruction and machinery, this Association must deal with the problem on the broad yet painstaking lines which will now be considered.

While provision is made for councilor district societies and other details which may grow in importance in the future, there are five essential features in the plan on which both the immediate success and the permanency of the work of this Association and the profession depend. Named in the order of their importance these are:

1. The county society, as the unit of organization and the foundation of, and the door to, everything above it.

2. A Council, selected from the profession at large, to represent and act for the Association under well defined restrictions in the interval of the annual meetings, and whose individual members are charged with the organization, supervision and well being of the county societies within their respective districts.

3. A House of Delegates, composed of a limited number of specially selected representatives from each county society, as the business body of the Association. To it is committed the duty of fostering in every legitimate way the scientific, legislative and material interests of the profession in their respective counties and at the annual meetings.

4. The General Meeting, made up of all the members of all the county societies who will attend, which can devote its entire time and attention to the reading and discussion of papers, to scientific and technical exhibits and reports of scientific research and investigation.

5. The JOURNAL, published under the auspices of the Association, and sent free to all members as a means of constant communication between the county societies, and between them and the councilors and other officials, as well as for the early publication and wide distribution of the transactions.

All of these features or departments are so interdependent as to be essential to the complete and permanent organization contemplated, but it will be perceived at once that the county society is made the bedrock on which the entire superstructure



rests; that it is made the chief function of the individual councilors, provided for every district in the state, to see that these are organized for, and kept alive to, the best interests of the members composing them, and of the profession as a whole; that the influence of every officer and agency in the entire system is focused on and directed to the same end, and that all these are to be continued until every physician of every county who can be made worthy of it is brought under the educational and elevating influence of his county medical society. Such an organization of the profession as this is ideal, but is believed to be entirely possible, if this possibility and the necessity for it is fully appreciated by the controlling influences in the state.

For obvious reasons it has always been easy to induce leading men from widely separated sections to attend and keep up the interest in the national, state, and even in district medical societies, but the problems to be faced in making the frequent meetings of county organizations, composed of those who have, or at least think they have, competing personal and professional interests, sufficiently interesting and harmonious to secure the requisite attendance, month after month, and year after year, are far different. In reality all their interests are mutual. In the best and broadest sense, what benefits or hurts one benefits or hurts all. To convince them that this is true is the problem still before the profession. It has been done in a few states and in some counties in all the states, and after a large experience the Council feels assured that it is possible everywhere. "What men have done other men can do." The difficulties are on the surface and will disappear in the face of a full recognition of their nature, and of a kind but frank and honest discussion.

It is mainly the lack of this spirit and the resulting conditions which cause so much poverty in the profession, interfering with it in every business aspect, just as the loss of public respect and confidence directly traceable to it accounts for most of the difficulties in securing needed medical and health legislation and in enforcing such laws when enacted.

Then, too, physicians are proverbially poor business men. As has been shown, this has resulted largely from the failure of even the best medical schools to give any instruction on the subject to start with supplemented by lack of organization and false ideas as to a conflict of interest be-

tween local men. There has been a singular delicacy of sentiment, too, about the propriety of discussing this subject either in medical societies or before the public. All this must be changed. The time has come for the public to understand that under modern conditions a physician who is a failure financially cannot keep himself qualified and equipped for safe practice, and that in consequence low prices and rate cutting are fruitful sources of danger to the public. Some voluntary understanding as to charges in each community is proper and necessary, but in order to prevent possible legal or other complications, as well as to comply with the by-laws, this should be arranged by the profession of a county acting in their individual capacities and not as a society organization. A medical trust would be as illegal and un-American as any other kind of trust. Besides, experience has shown that even the best intentioned efforts to enforce such agreements as a society, by expulsion or other penalties, have always resulted in further dissensions, with public sentiment and advantage on the side of the less scrupulous. Moral suasion, backed by an organized profession and an educated public sentiment, is the only remedy here, as in all similar matters. For these reasons the by-laws also provide that "each county society shall set apart at least one meeting in each year for a discussion of the business interests of the profession of the county," and for efforts for a proper instruction of the public on the subject. At this meeting some leading members who have been most successful along just and ethical lines should open the discussion, which should be so directed as to indicate the best and most practical methods for the guidance of all. It should include the frequency and best methods of making collections; the expediency of a common collector for a number of physicians, on a salary and with a separate office, who can devote his entire time to their service; of the advantage of an office at the residence, or the economy of a joint office with different hours, or a common waiting room with individual consulting rooms, with the same office attendant and telephone; of a hospital owned or directed in whole or in part by the profession; of the advisability of taking advantage of modern pharmaceutical conveniences, of dispensing their own drugs, and all similar questions, so far as they are adapted to the conditions and needs of that society.

In all of these matters the interests of the public should be fully and fairly considered, and at such meetings leading laymen may often be invited to take part in the discussions with profit to all. In fact, the mutual interests and obligations of the profession and public should be iterated and reiterated as a means of education for both. The best and highest sources of information are now open and reasonably accessible to all medical men in this country, and every community is entitled to and should have competent physicians and the best and most approved treatment in their afflictions. Most people who are in moderate circumstances, and all in emergency sickness, must receive this at the hands of their home physicians or not at all. Through systematic organization alone is it possible to furnish the incentives and opportunities requisite for such ends, and organization is incomplete until this has been done. This instruction, whether at home or in medical centers, with the incident equipment essential to its utilization in practice, is expensive and the public should be educated to its interest and duty in such a support of the profession as will enable its members to acquire them without depriving their families of the means of subsistence.

The social features of the society should also receive more attention than in the past, probably at the hands of a permanent committee with talent for such matters. Frequent and inexpensive lunches should be recognized as a legitimate and tasteful method of increasing the attendance and interest, and of promoting kind personal relations. In this respect the society should represent a gentlemen's club in its informal but dignified and respectful intercourse. It should be borne in mind by all concerned that members will take the time and trouble to attend only so long as the meetings are made pleasant and instructive. Little fear need be entertained on these points, however, if the Councilors, and through them the profession at large, can once be made to understand the character, spirit and advantages of the work, so that each officer and member may be induced to do his full part.

On account of the important powers and duties imposed upon the Council as a body, and still more upon its individual members, for years to come, at least, this office will be the most responsible one within the gift of the Association. Indeed, the inauguration and success of the entire work is so dependent on what he does that no man

should accept the office who cannot freely give the time and labor necessary to the efficient discharge of the duties. Everyone who would qualify himself for the office of Councilor should make a special study of the constitution and by-laws of this Association and of county societies. He should make himself familiar with the history of medicine, and especially with that of his own state and country. He should also inform himself as to the medical and health laws of the state. Joint meetings of the Council and State Board of Health should be held frequently in order that there may be that harmony of views and concert of action between those working for common ends essential to the best results. Representatives from the faculties of medical schools should be invited to such meetings for consultation as to the feasibility of establishing practical courses on ethics and business methods, as well as of having all advanced students advised as to the advantages of society membership and organization.

In a like way will come up the question of the advisability of admitting or retaining in the membership those who have been more or less unethical and off color in the past. Each case of this kind will have to be considered and decided on its merits, but it should be done on liberal lines. In a county where no organization worthy of the name has existed and where each physician has been forced to decide all the nice questions of professional conduct as they arose, on his individual and untrained judgment, this important part of medical education having been entirely neglected in most of our colleges, it will usually be found that there is no well defined boundary between correct and incorrect methods except on the part of those governed by native gentlemanly instincts. It will often be found that lack of courtesy or more or less vicious unprofessional methods have been handed down in both town and country from generation to generation of physicians, and that those now in practice there are largely the victims of this inheritance. In all of these matters, as in the consideration of the sectarian problem, the profession is confronted by a condition, not a theory. Legally and in the public estimation these men are physicians, and the profession is held responsible for them whether or not. Most of them are not essentially bad. These things being true, it will usually be better to give all who will come in a cordial welcome, and for a united profession, kindly and in



good faith, to encourage every effort they can be induced to make to refrain from methods into which they drifted through lack of training and environment for which they are not personally responsible. In regard to the whole subject of the admission of members, and still more of their treatment after admission, it should be urged that a spirit of conciliation be substituted for the old one of suspicion, selfishness and ostracism.

In handling all of these questions, and those concerned and affected by them, as in the discharge of his duties, the Councilor will find constant need for a knowledge of human nature, especially as modified in the genus *homo medicus*, tact, sound judgment, and a never failing good temper.

In explanation why it has gone back to first principles in the methods and difficulties of this work, the Council insists upon the necessity for it, as emphasized by the experience of every one of its members in dealing with the problems in some of the counties of his districts, not only this year, but every year, in contrast with the complete revolution which has taken place in adjoining counties where his efforts have succeeded. How far the benefits of such a system are to be extended to any particular county must be determined by its own profession, assisted by every possible influence from the outside, when needed. To say that much time and unceasing effort will be required to maintain such an organization in many counties, that many obstacles will be encountered, and that individuals will fail to do their duty or obstruct the work, is only to say that the undertaking is a vast one, that the agencies to be relied on are finite, and that it is subject to the vicissitudes attending all human endeavor. Our contention is that it is worth all the time, labor and money it will cost, and more. For ours is rapidly becoming a great science. Our leaders are among the greatest of living men either in peace or war. With proper ideals kept constantly before our young men, and the present facilities for attaining them, unknown to any other age, and impossible even to the older men of the present generation, with harmony and co-operation made possible and encouraged everywhere, and all supported by a public confidence, inevitable because it will be deserved, everything desirable will be brought within reach of the profession. The vexed problem of medical education can then be taken up with confidence, and

justly and wisely solved. Provision for continuous scientific research, and for systematic collective investigation into the causes and prevalence of disease, can be made by national authority on the broad and generous lines demanded by the great interests involved. Constructive statesmanship can be substituted for narrow, time-serving political methods everywhere in municipal, state and national health affairs, and our profession, united, educated and ennobled, will come to occupy its rightful place as one of the greatest of forces for the protection and elevation of mankind.

It has become popular to deride and decry politicians and political methods. It is just as important to remember that there are good and bad politicians and to learn to distinguish between them and their methods as that there are good and bad doctors or storekeepers or farmers or any other avocation or profession. The profession and people of Kentucky must remember that every law placed on the statute books is enacted by politicians. The Council for many years has come in contact with the General Assembly of Kentucky. Most of its members have been as anxious to do right as we have. Overwhelmed frequently by the multitude of subjects before them and the too short time provided by our archaic constitution for their consideration, they too frequently are the objects of an intense criticism which would have been unnecessary had their critics been forehanded in offering constructive and instructive advice while important measures were in the formative stage. If the unwise and unjust things frequently said about our legislators were true, then, indeed, representative institutions would be a failure. Your senators and your representatives are, as a rule, open minded and are glad to respond to intelligently expressed suggestions from those of their constituents who are really interested. It is not fair to ask Mr. Senator to vote for or against a particular measure and then criticize him if he fails to heed the request, unless the suggestion is accompanied by a reasoned, thoughtful exposition of the grounds for the request. When such an appeal is made, one receives a reply in like tone and one's suggestions are always courteously considered. These thoughts are expressed that individual members of the profession may explain to their elected representatives in the state's law-making body the altruistic purposes and unselfish aims of organized

medicine. If the physicians of each county will attend promptly to this very important matter there will be little danger from the small coterie of selfish and designing men who seek to wrest control of the health and medical organizations from the profession, and, under the cloak of an alleged democracy, with the "holier than thou" cry of the hypocritical demagogue, try to form the kind of machine which would help them and their kind to reap a material reward for their villiany or treachery.

We desire to reiterate and reemphasize the purpose of the organized medical profession in Kentucky to maintain intact the prestige, influence and standing of the physicians of this Commonwealth. It is our high purpose to extend our knowledge of both disease and health continually and so to utilize our knowledge in practice that we can ameliorate or cure or prevent the one and preserve the other wherever either is possible for our people. We are opposed to the socialization, federalization or lay control of medicine in any shape or form; it is our purpose to maintain under any program which may be adopted in Kentucky, free choice of medical advisers for our individual citizens. To these ends this Association instructs the State Department of Health and the County Health Departments that their most important obligation is so to cooperate with other branches of the medical profession and with the people that they may be kept so informed of the facts in regard to medicine that they will continue to repose their confidence in the only trained body of knowledge, thought and action that can give them any real hope for cure or prevention of disease.

The closing note in every report of the Council since its organization has been to emphasize again the paramount importance of the preservation of the integrity of the active organization of the county medical societies themselves.

The Council wishes to express again its very deep appreciation for the support it has received from the medical profession of Kentucky. It will continue in its efforts to accomplish the purposes of this Association as expressed by its House of Delegates.

PRESIDENT GARY: You have heard the reading of this splendid report by the Council. It will be referred to the Committee on Report of Council. If there is no objection, it is so referred. Next on

the program is the Treasurer's report.

SECRETARY McCORMACK: Mr. President, Dr. Davis, the Treasurer, has his report printed in full in the JOURNAL and it would automatically be referred to the Auditing Committee.

PRESIDENT GARY: If there is no objection it is referred to the Auditing Committee.

#### REPORT OF THE SECRETARY

SECRETARY McCORMACK: My contacts this year have been wholly pleasant. There have been more meetings of the county societies and more largely attended meetings than at any time in the history of the profession of Kentucky. That is the most satisfactory thing that can happen. There have been more than three times as many meetings of the county Boards of Health this year as in previous years. Of course, this is essential if we are to preserve that connection between the profession and the Health Department that is inherent in our system, because the county medical society in each county is the family physician of the county as a whole, and the Board of Health is its official agency which is directed by law to perform certain duties, but it does them under the direction and supervision and under the principles that are adopted by the county medical society and are reflected through the medical members of the Board of Health. It can only be by frequent meetings of the Board of Health of the county with the county health officer that the program will always be constructive and in line with the considered opinion of the profession of that particular county.

The problems of Western and Eastern Kentucky differ in many respects. Malaria in Western Kentucky is of paramount importance, just as the problem of pellagra is found almost to be confined to Eastern Kentucky. It is important that we keep all these things in mind and arrange our programs correspondingly. The increased value of the county Health Departments to the profession and to the people of the state is in large measure based on regular, systematic, well attended meetings of the county Boards of Health.

We have today the largest attendance at an opening meeting of the House of Delegates that we have ever had in the history of the Association. So far as I know, there are no controversial matters to come before the Association. It speaks well for the interest that you all have in



what we are doing that you are here to lend your influence to whatever is undertaken by the profession.

Anticipating what will be said tonight in the report of the Committee on Public Relations, I should like to urge you especially right now, while the legislators are in that malleable condition that they are preceding an election, that you approach them and discuss with them the problems that are presented in medical meetings, so that they will have an understanding now, long before they go to Frankfort, of the importance of the enactment of a hospital registration law, of the various constructive procedures that will be recommended by the Governor and his administrative council in regard to our eleemosynary institutions; that they understand from you and in whom they have confidence, the importance of these measures and the high purpose of the profession in the enactment of proper legislation.

In regard to the Food and Drugs Act, there will be a tremendous lobby, a lot of money, and a lot of low-grade lawyers, but all of these will be entirely powerless if you have seen your members of the Legislature before the session so that they understand just exactly what is going to be done. The honorable members of the Legislature—and that comprises ninety-eight per cent of them—will not even be influenced by their specious arguments if you have already fortified them so that they understand the situation.

I want to express the appreciation for all of our staff especially to the county secretaries, who have done a tremendous lot of work this year. The various surveys required by the Federal Government and by the American Medical Association have been completed in Kentucky perfectly. There is not a single physician in the state and there has not been one in the state in the last two years about whom a full report has not been made both to the American Medical Association and to the Federal Government, so that every man's record is there and they know what he is qualified to do; they know from himself first, and they know from the record that has been made carefully by your committees, exactly what the situation is. Further details will come from those committees in the course of the session in regard to these important matters, but it is essential for us to remember, and it is a little difficult for us to realize in a peaceful session like this where we are talking about scientific, constructive matters, that

we are in a world that is at war, that we ourselves are engaged in it and that our own people have their liberties, always sacred to them, endangered today, and that we have possibly the most important part to play in this great tragedy of any other vocation or profession in the whole human race. That we will do our part well is unquestioned.

It is always a pleasure to come before the Kentucky State Medical Association. It is a privilege to be a member of it, because its high ideals, its splendid practices, its courage and its vision have never been questioned successfully by anybody, and in making this brief report I want to convey to you the gratitude that I feel as one who has had the privilege of serving you so long and who will continue to serve you in whatever capacity you desire to utilize me. (Applause.)

PRESIDENT GARY: You have heard the report of the Secretary. Are there any comments?

The next order of business is Reports of Councilors by Districts.

SECRETARY McCORMACK: Will you permit me to ask unanimous consent to depart from the program for a moment? One of the scientific exhibitors with an exhibit on fractures has asked the Committee on Scientific Exhibit for a special expenditure of \$30 for the purpose of putting up particular screens. The committee has already expended the \$250 appropriated for this purpose, and it will be necessary for the House of Delegates to authorize the expenditure of the additional \$30. I would suggest that it might be advisable to take up a collection and furnish the \$30 out of our pockets, because I don't think we ought to spend any extra money out of the Treasury if we can avoid it, but that is a matter for the House of Delegates to determine.

This \$30 is to pay for some special screens that are different from all the other screens. Of course, I don't know whether you realize it or not, but the prima donnas who get up exhibits are very much like those who get up songs and operas; each one of them wants a particular shadow and a particular effect, and it is a little bit undemocratic to have one special thing for one group.

C. A. VANCE: Is it necessary?

SECRETARY McCORMACK: He thinks it is necessary or he wouldn't ask for it.

C. A. VANCE: Where is he? Let's hear him tell about it.

PRESIDENT GARY: Meanwhile, we will

have the District Councilors' reports.

#### FIRST DISTRICT

V. A. STILLEY, Benton: It is gratifying to me, of course, to represent the First District or to try to represent it, as Councilor, which I have tried to do for twenty-five years or more, and it is very gratifying to report that every single county in the district has a society. We not only have a medical society in each county, but there are four separate district societies comprising two or more counties. Of course, our largest district society is the Southwestern Kentucky Society, which is one of the largest in the state, and is well attended and well represented. Then we have Crittenden, Lyon, Caldwell and Trigg. Then we have a district down in the extreme western part of the state.

We have in membership about the same number that we had last year. They are all progressive men, ethical, and it is a great pleasure indeed for me to make a report for the society.

I can't pass by without saying something about the Woman's Auxiliary. Maybe it is a kind of hobby of mine, but we can have better meetings, we do have better meetings, when we have the Woman's Auxiliary holding a luncheon with us, and then the women have their meeting and the physicians have their scientific program; there is better entertainment, we have better fellowship, and as far as I am concerned I know we have better attendance in those counties that have Auxiliaries. We have tried it in our county, and while we have few physicians in the county, we generally have eighty-five to ninety per cent of the doctors in the county present. I guess their wives bring them. If you have a Woman's Auxiliary that is active and if you meet with them or let them meet with you, and have a luncheon and spend an hour's pleasant time and then have your scientific program, I believe you will find that your attendance at your medical society meetings will be better.

From a public health standpoint, have your health officer and your nurses and your sanitary inspector, too, because if there ever was a time when we needed sanitation, if there ever was a time when we needed preventive medicine, now is the time. We are going to be short of doctors if this unpleasantness goes on, and the more we help to prevent preventable diseases, the more we associate with one another, I think the more good we are

going to do. Have those folks on the program. If they are not doing right, tell them so; and if they are doing the right thing, give them a pat on the back and tell them that they have been doing a good job.

It is a pleasure always to try to make a report for the First District.

T. A. FRAZER, Crittenden County: Mr. President, a lady came around and whispered to me that she wanted me to make a statement in regard to the 4-County Medical Society, Crittenden, Lyon, Caldwell and Trigg. We adopted a rule down there—I don't know whether it is unique—to invite the dentists to attend our meetings. We had the head of the dental department of Vanderbilt University at a meeting at Marion recently. He had all sorts of exhibits. He spoke to us for an hour and a half, and made one of the best, one of the most enlightening talks that I have heard before a medical society in years.

We pay \$5 a year fees. That pay for our meals and leaves enough in the treasury to pay for guest speakers.

At our last meeting at Eddyville, four weeks ago, Dr. Casper, of Louisville, put on a program. He talked to us about every-day surgery; he talked about the things that we country doctors are confronted with every day. He made one of the most wonderful talks I have heard on minor surgery. Dr. South was with us and spoke on the diarrheas.

Our organization is only three years old. We have never had less than twenty-five doctors at a meeting, and we have had as high as thirty-five. All of our counties are too small to have regular meetings and make them of interest. I don't think there is anything that promotes good-fellowship among the doctors better than to eat together. We always eat good meals, because they are prepared by the ladies of the churches where we meet. We pay them a dollar a meal and they fix us a good one. We have a good time and a good program.

I would commend that plan to the counties that haven't enough members to have regular meetings. Get together with other counties, organize a two, three or four-county medical society and make it a go.

#### SECOND DISTRICT

D. W. GRIFFITH, Owensboro: I beg to submit my annual report as Councilor of the Second District for the year 1941.

We have 118 paid members this year as against 126 last year. That is a splendid



showing when we consider that six doctors went to the Army from Daviess County alone. Organization affairs are in splendid condition.

In June, a meeting was held in Owensboro, arranging a district society for the eastern section, and it will meet again October 9, 1941, at Greenville. I am arranging for a meeting soon at Morganfield for the western section of the Second District.

#### THIRD DISTRICT

C. C. TURNER, Glasgow: The Third District is composed of twelve counties, with a total population of 212,436. It has 149 active physicians, 129 members, and 20 non-members as against 127 and 34 in 1940, or 12 fewer. Five of these have died. They were Drs. Austin Bell, Hopkinsville, President of the Association; H. M. Meredith and C. W. Holland, Scottsville; C. E. Francis, Bowling Green; and W. E. Simmons, Smith Grove. Of the others, some have been called to the Colors, notably, Paul S. York, Glasgow, and George Wells, Bowling Green; and others have moved away and still others seem to have just evaporated.

There are 170 hospital beds, not including Western State, and no citizen lives more than 40 miles from a hospital.

Monthly meetings are held in most of the counties. During the past year, the Councilor has taken part in programs in each of the counties where meetings were held. The Third District Medical Society meets every other month at Bowling Green. During the ensuing year the Councilor is also President of the Third District Medical Society. The program is furnished by speakers outside the District, usually from Louisville or Nashville.

All meetings are well attended and splendid fellowship exists among our doctors.

#### FOURTH DISTRICT

J. I. GREENWELL, New Haven: The Fourth District is composed of the following counties: Breckinridge, Grayson, Hardin, Hart, Larue, Meade, Nelson and Spencer.

It is with pleasure that I am able to report an increase of nine members over last year. There is a total of 82 doctors in the District, 61 of whom are paid-up members and 21 non-members. I hope by the time of this meeting some of the non-members will have paid their dues.

I wish to announce the medical profession in the Fourth District is becoming

more active and taking more interest in both county and state societies than in previous years. We did not have any district meetings this year, but the Muldraugh Hill Medical Society meets four times each year at Elizabethtown, and most of the doctors in this district are members of this society and attend these meetings regularly.

#### FIFTH DISTRICT

J. B. LUKINS, Louisville: The Fifth Councilor District is glad to report that this year we had 521 paid-up members. This is an increase of 32 over last year.

Last autumn we had a very interesting and instructive meeting at Shelbyville. The Shelby County Medical Society was host, and a pediatric clinic was arranged and conducted by Dr. Philip F. Barbour and Dr. James H. Pritchett. Following the clinic were three scientific papers presented by Dr. William Snyder, of Frankfort, Dr. M. H. Pulskamp, of Louisville, and Dr. Emmet F. Horine, of Louisville. This was the only scientific meeting of the year.

We had a get-together meeting with the Jefferson County Medical Society in June, which was in the form of an outing. Baseball, skeet, horseshoes, and a fish and hamburger supper were all greatly enjoyed. We are told that other forms of pastime which required less skill but more chance were indulged in until a late hour, after the departure of Dr. McCormack and several of the other sober-minded members of the profession.

Things are in excellent shape in our district, and as far as we know, a spirit of good will and helpfulness prevails among most of the doctors in our nine counties.

#### SIXTH DISTRICT

W. B. ATKINSON, Campbellsville: Mr. President, the first thing I want to say is to express the appreciation of the Councilor for the hearty cooperation that the profession of the Sixth District has given me in the last few years. It is indeed an extreme pleasure to be able to be with these excellent men.

This district, for the first time in a number of years, has no outstanding feuds that I know of. There have been some in the past, but the undertakers have helped us and some of them straightened out their own little matters and everything is going a great deal smoother.

The outstanding thing that is happening in our district now, as you know, it contains all of the Jane Todd Crawford

Trail—is that the McDowell Memorial and the Doctor's Shop are almost completed.

The Trail, under the leadership of Mrs. McCormack and the sub-leadership of Mrs. Durham of Greensburg, is slowly but steadily being beautified. The Woman's Club of Greensburg has recently secured a deed to the site of the old Crawford home. The people of Green County, with the cooperation of the Woman's Club there, are planning to build the Crawford cabin over once more, and also they have a right-of-way of the road into this site. They also have a Jane Todd Crawford Library down there, and although the doctors of our district have not supported that as well as we should, these women are almost shaming us into supporting the thing.

We have at the present time some 90 to 95 doctors in the district. Some six or eight of them are now retired. Some 71 of these are criminal conspirators because they have membership in the county society as well as the state association and the A. M. A. Of that number, some 15 are double-crossing us by giving a good deal of their time to the examination of draftees and working on the boards.

#### EIGHTH DISTRICT

LUTHER BACH, Bellevue: We have 191 paid-up members, as follows:

County	Members
Boone County .....	4
Bracken-Pendleton .....	12
Campbell-Kenton .....	116
Fleming .....	11
Grant .....	11
Harrison .....	15
Mason .....	12
Nicholas .....	8
Robertson .....	2

Grant and Robertson Counties are blue ribbon counties inasmuch as each has 100 per cent paid-up membership. In fact, all the counties in the Eighth District have a very high percentage of paid-up membership, with the exception of Campbell-Kenton, which is accounted for by physicians listed with residences in these counties but having offices in Cincinnati and having membership in the Cincinnati Academy of Medicine.

A number of hospital interns have come to our midst since July 1, and a group of young men who are in the military service.

The Eighth District has an active district medical association known as the Licking Valley Medical Society, which meets once each quarter with some very profitable programs.

All counties in this district have organized medical societies with the exception of two of the smaller ones, and it has been my privilege to visit a number of these meetings during the past year and enjoy some of the excellent programs and discussions in the various counties.

My attention was called, after completing this report, to one of the other reports concerning the Auxiliary. We have not only our own Auxiliary for one of the counties, but also a District Auxiliary which meets at the same time and with the physicians in our District Association, once a quarter. I think this has been an inspiration in helping with the attendance at these meetings. We have had some wonderful programs in the various meetings that I have had the privilege of attending in the various counties, as well as the district meetings. I feel that the conditions in the Licking Valley Association or the Eighth District are gradually improving and that we are very proud of the medical situation as it exists in that district this year.

#### NINTH DISTRICT

PROCTOR SPARKS, Ashland: It is a great pleasure for me to try to represent the Ninth District. We have had more meetings of the county societies than ever before. We have had four district meetings, the first being held at Pikeville, Kentucky, which was a very successful meeting. The second district meeting, with a reorganization of Floyd County Medical Society, was held at Martin, Kentucky. We had a fair attendance. In this county we have two factions and it seems impossible to get them together. The third district meeting was held at Grayson, Kentucky, which was a good meeting, but poorly attended. We are grateful to the Lexington and Louisville doctors for their support in the district meetings. Our fourth district meeting was held in Ashland, Kentucky, on Tuesday following Labor Day, which was a poor time to have it and it was poorly attended. Drs. Simpson and Bass, from Louisville, were the essayists, both papers being very interesting. Dr. Simpson's paper on our tubercular situation in Kentucky received a lot of compliments and he should be congratulated on his tireless effort in his national and local study of tuberculosis.

The Ninth District is composed of Boyd, which has 39 active members and 5 non-active members; Carter, which has 7 active members and 4 non-active members; Elliott County, which has 1 active and 2 non-



active members; Floyd County, which has 11 active members and 19 non-active members, which is a poor showing for Eastern Kentucky; Greenup, which has 9 active members and one non-active member; Johnson, which has 15 active members and 4 non-active members; Lawrence, with 8 active members and 1 non-active member; Magoffin, 2 active members and 3 non-active members; Martin, with 2 non-active members and no active members, and Pike, with 23 active members and 13 non-members.

The Ninth District has suffered by death the loss of one member, H. S. Swope, Ashland.

#### TENTH DISTRICT

C. A. VANCE, Lexington: I have the honor to submit herewith the following report of the Tenth Councilor District.

The Tenth District has 268 paid-up members this year. Last year we had 269, which was the largest we have ever had in this district. The county society register is as follows :

County	Membership
Bath .....	5
Bourbon .....	14
Breathitt .....	5
Clark .....	15
Estill .....	7
Fayette .....	125
Jessamine .....	11
Lee .....	3
Madison .....	33
Menifee .....	1
Montgomery .....	7
Morgan .....	2
Owsley .....	3
Powell .....	3
Rowan .....	6
Scott .....	17
Wolfe .....	3
Woodford .....	8

Total ..... 268

There are approximately 53 non-members in the district. Of this number, 26 have retired on account of age or illness or have moved away from the state, or have gone into the Army, or are practicing as interns in the hospitals in Lexington or in the Veterans' or Narcotic Hospitals. That leaves 27 non-members, and some of these are not eligible. It seems to me that all of the physicians in the State Hospitals and Veterans' Administration Facilities and the U. S. Public Health Service Hospital should be members of their local societies. I have done every-

thing possible to get them all in, but many of them do not agree with me and are not members.

Bath, Breathitt, Jessamine, Lee, Menifee, Morgan, Montgomery, Owsley, Rowan, Powell and Wolfe County Societies hold occasional meetings.

Bourbon, Clark, Fayette, Madison and Woodford County Societies have held regular meetings this year, and these have been well attended and their programs were interesting and instructive.

You will note that I haven't reorganized Woodford County Society for several years. Nearly every year we reorganize Woodford County and get a story about it and then the next year we have to reorganize it again.

Breathitt, Estill and Powell Counties have all the physicians in their counties as members of their county societies.

The Tenth District has suffered by death the loss of the following physicians since the last meeting of the Association:

Walter Pinnell, Mt. Sterling.  
 Carl Lewis Wheeler, Lexington.  
 Charles F. Voigt, Midway.  
 Joseph S. Lehman, Midway.  
 O. P. Clark, Winchester.  
 William C. Ussery, Paris.  
 W. G. Dailey, Millersburg.  
 George C. Goodman, Paint Lick.  
 Scott D. Breckinridge, Lexington.  
 S. H. Martin, Wilmore.  
 R. M. Coleman, Lexington.  
 Porter Prather, Lexington.

Last year the District lost four members by death; this year the loss is twelve. All of these men were active in their county societies and were highly respected by their associates in practice and by their communities. All of them will be greatly missed.

Dr. Carl Lewis Wheeler had been retired for a number of years, but was formerly a well known urologist practicing in Lexington, and he was very active in all of the meetings and proceedings of the Kentucky State Medical Association.

Dr. William C. Ussery and Dr. W. G. Dailey were the oldest members of the Bourbon County Medical Society, and both had retired from active practice. The two died within a few months of each other. They were especially beloved by their associates and patients.

The Association suffered a great loss in the death of its President, Dr. Austin Bell, of Hopkinsville, and also in the death of Dr. Louis Frank, a Past President, of

Louisville. Dr. Bell's death was as he wished. He was doing work and attending meetings up to his death, and his last effort was to attend a meeting in Louisville where he died. I am sure he wanted to go that way. He was a fine, high-class gentleman and physician and citizen. Dr. Louis Frank came originally from Paris, Bourbon County, in our Tenth District, and had always kept his friends and associations there. We looked on him as really a member of our district. He was a master surgeon and teacher and enjoyed a wide acquaintance and friendship of surgeons and people everywhere. These two men, Drs. Bell and Frank, a surgeon and a medical man, represent the best in our Association and their like will not be seen soon. We mourn their loss, together with the twelve members of the Tenth District.

Our summer district meeting was held this year at the Lexington Country Club, and a program was presented by Drs. Buckles and Griswold. It was a large and enthusiastic meeting and I feel that it was one of the best meetings we have ever held in this district. Our district meetings are entirely social and scientific. I believe these meetings are important and should be held occasionally, but they should in no way interfere with the meetings of the county societies.

In all of my reports to you as Councilor of the Tenth District, and this is my sixteenth, I have spoken of the importance of the county society, and I am on record many times in the transactions of the Kentucky State Medical Association as favoring the upbuilding of the county society. There could not be a Kentucky State Medical Association if interest were lost in the county society, so let me urge you again and again to keep up your county society as the most important unit of organized medicine.

#### ELEVENTH DISTRICT

H. K. BUTTERMORE, Liggett: Mr. President, the membership in the Eleventh District has had a very satisfactory increase during the past year. Several of our doctors have been drafted into active Army service, and a few of our most prominent and worthy doctors have died during the past year.

The defense program has called on our district for more fuel. Thus, several of our power plants, coal mines and manufacturers of gas have resumed operation, bringing more employees into our community, and more work to labor. This increase in

employment and population has brought more work for our doctors. Thus, the doctors in Eastern Kentucky are laboring hard, diligently, and long hours for our people.

In most of our counties we have efficient health units which are working diligently to prevent sickness and epidemics among the people. I am hoping it will not be long until the few remaining counties will have the benefit and service of health units.

During the past year there have been very few malpractice suits. I am satisfied that the doctors in Eastern Kentucky are prosperous and that very good relationships exist among them.

Every county medical society and its members are ready to go before the next legislature and use their influence to pass some laws that will take care of our indigent tubercular patients.

PRESIDENT GARY: I wish to thank the Councilors for these full reports. The information they give us is very valuable in the affairs of our societies.

The next item on the program is Reports of Delegates by Counties.

#### BELL COUNTY

SAM FLOWERS, Middlesboro: I wish to report for Bell County that our medical society covers one of the largest counties in Kentucky in the industrial region, including the two towns of Pineville and Middlesboro, which scrap for the distinction of being cities. Our meetings are held alternately from month to month, one month in Pineville, one month in Middlesboro.

We have about 35 or 36 physicians in the county, and the medical meeting attendance averages about 16, which is not particularly good and would not be good for this section of the state, but is pretty good for our county where transportation is something of a problem many times.

#### BOYD COUNTY

E. C. McGEHEE, Ashland: I think Dr. Sparks just about covered the report for Boyd County. The society is active there. We take the summer months off; there are no meetings at that time. As Dr. Sparks has told you, our programs are furnished to a great extent by members of the profession from Covington and occasionally Cincinnati and Louisville quite often. These meetings are all dinner meetings, and because of the dinner meetings I think we have considerably better attendance than we would have otherwise. The meetings are held at one of the hotels and are usually interesting and instructive.



## BREATHITT COUNTY

M. E. HOGE, Jackson: We have but six members in the county; therefore, we don't have time to have very many meetings. We get together once in a while and talk it over, but we are all busy up there and hardly even keep any record of what we do.

## BUTLER COUNTY

D. G. MILLER, JR., Morgantown: We have three practitioners and all get together once in a while, but we have to go to Bowling Green to get scientific meetings.

## CAMPBELL-KENTON COUNTY

J. ASHER CALDWELL, Newport: We have about 160 cooperative members of the society. There is good fellowship and we are getting along very well.

## CARLISLE COUNTY

E. E. SMITH, Bardwell: The Carlisle County Society functions regularly in its monthly meetings. We have only five doctors in the county; they are all members of the county society. We function as a society as a tri-county society with Ballard and Hickman. There are so few of us that we have to get together in that way. Our meetings are evening meetings and are usually successful.

## CHRISTIAN COUNTY

DELMAS M. CLARDY, Hopkinsville: The secretary of the Christian County Medical Society is not here, and I want to thank the House of Delegates and the Council and the Association for the sympathies that were shown at the death of Dr. Bell, and also to thank the Kentucky State Medical Association and the House of Delegates and the Council for the election of Dr. Gary as President of the Association.

## CRITTENDEN COUNTY

SECRETARY MCCORMACK: Before Dr. Frazer starts I would like to say he has been making reports continuously longer than any of the rest of us.

T. A. FRAZER, Marion: Arthur would make you folks think I'm getting old.

Crittenden County has seven doctors. One is retired and one is practically retired; he is senile. We have six members in the county society. We have very few meetings, no scientific meetings. We affiliate with the 4-County Society and the Southwest Kentucky Society, which gives us eight good meetings a year. I think it is much better for us to do that than to try to have a meeting of five or six doctors and maybe get two or three of them there.

## CUMBERLAND COUNTY

WILLIAM FAYETTE OWSLEY, Burkesville: We have the best organized society in the state. It stays put. It was organized among the first societies of the state. All officers are elected for life. We never have a meeting and no business to come before the meeting. We feel that we know as much as the other fellow, and there are some things that we don't even want to know. We don't cut or split fees; we just take what we can get and are satisfied. We spend part of two or three days collecting fees. We have five doctors in the county, all paid-up members and all in good standing. We just love everybody and we think everybody loves us; we are happy and want no change.

## DAVIESS COUNTY

W. L. TYLER, Owensboro: The other delegate should make this report but he has some unfinished business somewhere, so it is up to me to give a rather indefinite report.

The membership of Daviess County Medical Society has remained stationary for the past year, with the exception of the loss of one member by death and five of the younger men have gone into the service. So far as I know, these men in the service still retain their membership in the county society and expect to come back the first chance they have.

I think all of the active doctors in Daviess County are members of the society and attend.

There has been built in Owensboro, in Daviess County, a very magnificent hospital of which we are very proud. There seems to have been some hitch in the funds to build this hospital, and there was no provision made for furnishing it, so the medical profession, as doctors sometimes do, talked too much and made a statement that if the citizens of the county would furnish the hospital otherwise they would furnish the operating rooms and the obstetrical rooms, which was a good big burden on the society, but they did it. I think the furnishing of that hospital cost somewhere between thirty and forty thousand dollars, which was all done by public subscription initiated by a statement made by the doctors that they would furnish the operating rooms and the obstetrical department, which I think possibly some of them are sorry they said they would do, but they did it.

Our meetings are twice a month with the exception of the summer months.

Every other meeting is a staff meeting, but all the members of the county society attend this meeting and enter into the discussions that are reported by the staff of that particular hospital. The meetings are always well attended and the scientific sessions once a month are usually a big per cent of the time, addressed by an out-of-town speaker, who always furnishes us with some information.

Our last summer meeting, in June, I think, was just a social meeting. We had a barbecue and invited some of our neighboring towns to form a kind of joint county or district meeting, which was perfected there. There was a lot of iced tea, and other things to drink at that meeting, and I have forgotten just exactly where they are to meet and the name of that society.

SECRETARY McCORMACK: I notice Dr. Johnson, Chairman of the Committee on Scientific Exhibits, has come in. Dr. Johnson, the question of an additional appropriation of \$30 for one of your exhibits came up, and they wanted you to justify that appropriation or tell us it is not needed, or something. We want to save the money if possible, or do whatever ought to be done.

W. O. JOHNSON, Louisville: The Scientific Exhibit Committee has no personal grudge. The committee was told that each exhibitor would have sufficient space. We solicited as many as we could, the number we thought would be interested in having booths, and found that our space available was not sufficient to take care of the ones who wanted to present their material. It was the understanding that every person as to qualify in presenting his material as he desired at his own expense. I would be delighted to make everyone who wished to make a booth a presentation and say that we would go ahead and put in anything and the Kentucky State Medical Association would pay for it, and I wish they would, but as a principle we can only do a general thing. That is the way the committee feels about it.

A request came for a \$30 expenditure for special equipment for the display of x-ray slides. I obtained permission for eight additional view-boxes, which were not satisfactory; I obtained a new way of displaying these slides, which was not satisfactory, and was told that unless conditions were provided such as had been given at the American Medical Association and

the Southern Medical Association, it would not be satisfactory.

From a personal viewpoint it doesn't make any difference, but from a scientific viewpoint it does, and in the past five years the Association has given a background upon which to display the articles in the scientific exhibit, paid for by the State Association, and each man was responsible for his display. That is the stand the committee has taken.

SECRETARY McCORMACK: I move that the report of the committee be approved.

JOHN W. SCOTT, Lexington: Do I understand that Dr. Johnson does not approve of the appropriation?

SECRETARY McCORMACK: That is right.

J. W. SCOTT: I second the motion.

PRESIDENT GARY: Is there any discussion?

The question was called for and the motion was carried unanimously.

PRESIDENT GARY: We will resume the county society reports.

#### FAYETTE COUNTY

E. B. BRADLEY, Lexington: Fayette County has 120 active members; 5, I believe, are in the process of being elected; Dr. Vance reported 125 in his report. Fayette County has a scientific meeting every month. Two papers are presented by members of the society each month, except once a year when we have a dinner meeting, with distinguished men from outside as guests. I believe we have an average attendance at our meetings of about 50; about half of the members attend regularly, and there is always a very enthusiastic membership present.

Fayette County is fortunate in having a full-time health department. It is doing excellent work and is not in any way antagonizing members of the society by any of its health work, so far as I know. I have heard no unfavorable comments on the work; in fact, the contrary is quite true.

We have two very fine hospitals in Fayette County, and of course we have the Julius Marks Tuberculosis Sanitarium that is doing wonderful work for the county. In addition to those, we have two Federal hospitals, the United States Public Health Service Hospital which is known as the Narcotic Farm, and the Veterans' Facility. Those hospitals do not add largely to the medical life of Fayette County, but some of the doctors who are at these hospitals are members of our Fayette County Society.

During the last year I think we have



gained probably four or five members. We have lost four by death, but I think we have a few more this year than we had at the same time last year.

#### FLEMING COUNTY

Secretary McCormack read the report of the Delegate: "There are 10 regular practicing physicians and a health officer who treats indigent venereal disease patients referred to the health department. There is one eclectic who spends several months each year in Florida. All the physicians are members of the county medical society except two. Four meetings have been held this year, with an average attendance of six. There is a very cordial relation between the members of the society and the health department."

#### FLOYD COUNTY

J. W. BAILEY, Wheelwright: Dr. Sparks in his report as Councilor practically gave the report of Floyd County. Instead of having 30 members, at the present time we have 24 doctors in Floyd County, 11 members and 13 non-members. Six doctors have left since he wrote out his report. We have a full-time county health unit which operates clinics over the whole county. At the present time the county society meets once a month. We reorganized in June. We have a pretty enjoyable time at each meeting. We try to have some doctor from some of the other cities, Lexington, for instance, to present a scientific paper for us. Of the 11 members that we have, there are anywhere from 5 to 10 at each meeting.

#### FRANKLIN COUNTY

F. M. TRAVIS, Frankfort: This is the report of the Secretary, T. P. Leonard.

Since the last meeting of the Kentucky State Medical Society the Franklin County Medical Society has held eight regular meetings with one called meeting. The average attendance for the year has been 51 per cent, an extremely low percentage until one considers that a good many of the members are located outside Frankfort.

The officers for 1941 are: Grace Snyder, President; L. L. Cull, Vice President; T. P. Leonard, Secretary and Treasurer; and Delegate, F. M. Travis.

The society now has 18 active members. During the year, death called one of our most beloved members, J. P. Stewart. Another member, L. E. Elliott, was lost when he moved to Benton. We were happy to welcome back Dr. A. M. Lyon, after an absence of several years from our community.

Out-of-town guest speakers presented the scientific programs at all regular meetings.

During the year, Dr. C. E. Youman left private practice to accept a position at the Feeble-Minded Institute located in Frankfort. None of our members have been called as yet into the service of the Army.

I notice the Councilor omitted that we have one member who is not active.

#### GRANT COUNTY

P. E. HARPER, Dry Ridge: Grant County wishes me to report to you that we are still standing on our original laurels of 11 active practicing physicians and 11 active men in our society. We have recently, since the first of August, combined our Health Department with that of Owen County, which to date has proved very satisfactory, much to our surprise. We have had two of the earlier cases of Rocky Mountain spotted fever which were diagnosed at home and later confirmed by laboratory diagnosis. Likewise, we have had two cases of typhoid fever, which is unusual for our county and which we believe to be due to some of the unsanitary conditions of other counties, because in both cases they had recently made trips outside of our county.

We hold monthly meetings, with the exception of July and August, and we do have an active membership. We have never yet obtained a hundred per cent at any one meeting, but the attendance is varied enough that when one is absent another takes his place. Otherwise, we are still practicing medicine in the country and trying to live up to the standards, and the people who have the laboratories confirm our diagnoses. We try to send in our cases and let the laboratories confirm us.

#### GRAVES COUNTY

N. M. ATKINS: Graves County has 22 doctors, all members of the county and state medical associations. We have had six meetings this year.

#### GREENUP COUNTY

VIRGIL SKAGGS, Russell: Greenup County has nine active members. We regret the loss of our health officer in the past week. We have infrequent meetings. For scientific programs we usually go to Ashland.

#### HARDIN COUNTY

GEORGE BRADLEY, Elizabethtown: There are 21 paid-up members, two in the Army who are not regular Hardin County physicians but are Regular Army men who are members of the local society. There is one non-resident physician, one retired mem-

ber, two doctors who are not members, a total of fourteen practicing physicians. We live together in harmony and respect one another professionally and personally.

The presence of the large Army post in Hardin is a rather unusual condition as far as the health situation is concerned, inasmuch as both the Army men and the civilian workers are coming there from all parts of the country, bringing diseases which are endemic in other sections but not there. However, we have been able to maintain a satisfactory condition of health with no unusual epidemics in the last year.

#### HARLAN COUNTY

CLARK BAILEY, Harlan: Harlan County has 45 active members and 3 non-active members. During the last year we lost one member by death, Dr. M. D. Hoskins. We had four members enter the service of the United States Army during the past year.

We have a meeting each month. As Dr. Vance said in his report, we think that good food contributes to our meetings. We have speakers from Louisville, Lexington, and Knoxville, and we feel that that contributes a great deal to the success of our meetings.

Last month we had a meeting sponsored by the Councilor and a presentation by the Medical Economics Committee, which was a very successful meeting.

We have a very close medical society and we feel we are getting along very well.

#### HARRISON COUNTY

J. P. WYLES, Cynthia: The Harrison County Medical Society in the past year has held twelve meetings, with an average attendance of twelve and a fraction. Our largest attendance was twenty-seven and the smallest was six.

We have fourteen members who have paid their dues and every active practitioner in the county is a paid-up member. We have three doctors who have retired because of ill health and advanced age. One doctor recently moved out of the state.

Guest speakers during the year were: Drs. Henry Springer, Cincinnati; John W. Scott, Lexington; John Hunt, Cincinnati.

Our September meeting was held on the 28th of July, in conjunction with the Harrison County Health Unit, in order to hear Drs. Philip Barbour and Harry Andrews, who are connected with the State Board of Health, talk on poliomyelitis and diarrhea in infants and children, respectively.

#### HENDERSON COUNTY

R. EMERSON SMITH: I did not receive

the report from the secretary before I left, but I think we have the same number of members that we had last year, that is 17, with three in the county that do not belong to the society. Henderson is hoping to have a new hospital and also a new health center. I would like to state that every physician in the county is behind it without any selfish interest, and there has been no dissension or question of doubt in the minds of any of them. I think their willingness and their wholehearted cooperation in trying to obtain this is one of the best symptoms that we have had in quite a while in that part of the state. The unanimity that exists in our county at present is growing and has grown steadily for the last three or four years. Our Health Unit there is doing the usual work that it has always done. It is expanding, and I doubt if there is a better Health Unit in the State of Kentucky.

#### JEFFERSON COUNTY

B. W. SMOCK, Louisville: Dr. McCarty is Chairman of the Louisville delegation, but he presumably is not present. As secretary of the delegation and secretary of the Jefferson County Medical Society has 461 me a great deal of pleasure to report to the House of Delegates on the activity of the society in Louisville for the past year. The Jefferson County Medical Society has 461 members in good standing and 12 delinquent members. At last year's meeting, held at Lexington, September 16-19, we reported 438 members in good standing and 18 delinquent members.

Since October 1, we have had 14 regular meetings and 4 dinner meetings. We have had a number of guest speakers: On December 2, Dr. Lewis J. Moorman, of Oklahoma City; on December 16, Dr. F. E. Schmidt, of Chicago, Illinois; on February 17, Dr. George B. Eusterman, of the Mayo Clinic; on March 17, Dr. Frederick H. Falls, from the University of Illinois College of Medicine, and on May 19 we had a military medicine program with four guest speakers from the Army Medical Service.

A picnic meeting was held on June 16 at Liter's Park. This was a joint meeting of the Fifth District and the Jefferson County Medical Society.

In November the Jefferson County Medical Society was host to the Southern Medical Association. This meeting brought 2,064 visiting doctors to Louisville.

During the past year we have had an attendance of 1820 members for an average meeting attendance of 101. This, with our



guests, has made a rather nice audience. It is the best attendance we have had in the past ten years. We have had a number of guests meeting with us, due to the fact that there is quite a large medical personnel across the river in Charlestown and due to the fact that a number of the men in the medical service at Fort Knox have come to meet with us on our stated meeting occasions. I feel this has been one of the most successful years in the history of the Jefferson County Medical Society, and I assure you that as a member of your Entertainment Committee for this convention, we welcome you wholeheartedly and hope that you will enjoy your stay with us.

#### JESSAMINE COUNTY

C. A. NEAL, Nicholasville: Jessamine County has about ten or eleven doctors. We have eight paid-up members, and I believe two not paid up. We lost one member by death this past year, Dr. Martin. We do not have a full-time Health Department, but I hope that sometime we will be able to establish one. We have had for the past two years a full-time Red Cross nurse, which is of some value to all of us.

We do not have regular meetings, but we frequently attend the scientific sessions at Lexington.

#### LETCHER COUNTY

B. C. BACH, Whitesburg: Letcher County has 26 physicians serving its 45,000 people; 23 of them are active members of the society. We meet regularly every month.

During the year we have lost three men to the Army; two have died. We have lost a very outstanding, active member of our county society, Dr. Shepherd. He died only recently.

We usually have had two dinner meetings during the year. We have three industrial hospitals in the county, the largest of them with a 90-bed capacity. We have a full-time Health Department which is very cooperative with the profession as a whole. We alternate our meetings between Whitesburg and Jenkins.

#### MADISON COUNTY

ROBERT SORY, Richmond: The Madison County Medical Society has had a very satisfactory year. In our county there are 38 doctors. This year there were 33 paid memberships in the society. There are four doctors in the military service and two retired.

We had monthly meetings with a good scientific program, with the exception of the months of July and August.

We have five hospitals in our county,

four general hospitals and one special hospital for the treatment of trachoma.

SECRETARY McCORMACK: I would like to call the attention of the House of Delegates to the compliment that has been paid to our Trachoma Hospital by the repeated visits from the official family of the medical profession and the Health Department of the State of Virginia, following which they have undertaken a similar campaign against trachoma in Virginia, and Dr. Sory was invited to come over and conduct their first clinic for them. It is a distinct compliment to the profession of Kentucky and to Dr. Sory, who has rendered such distinguished service in the Irvine McDowell Memorial Hospital at Richmond.

#### McCRACKEN COUNTY

LEON HIGDON, Paducah: There are 38 active, paid-up members in McCracken County Medical Society. During the past year, two members have been lost by death, Drs. Acree and Morris. Dr. H. T. Werner has moved out of the state. There has been one transfer from Bourbon County, Dr. Blake having moved to Paducah. The society is in good condition. We hold regular monthly dinner meetings except during the months of June, July and August. Usually the program is presented by guest speakers, however, members of the society are encouraged to present papers and subjects for discussion. Practically all members of the society are active members of the Illinois Central Hospital and the Riverside Hospital, at which places are held monthly staff meetings, which are well attended. Our members are also active members of the Southwestern Kentucky Medical Society, which meets quarterly.

Throughout the year the membership has ample opportunity for meeting and discussing their medical problems.

#### MARSHALL COUNTY

A. J. BEAN, Brewers: We have eight members who are regular members in our Marshall County Medical Society, and only one doctor who doesn't belong, but he attends part of the time, when we can get him to. We have five doctors in the TVA. We have dinner meetings, we have monthly meetings, and our Auxiliary meets with us. We have a full-time Health Department with two doctors there. Of course, Dr. Stilley doesn't do any regular work, but those two doctors meet with us. We haven't any hospitals in Marshall County because we are too small, I guess, to have them. We have two at Paducah and Murray and Mayfield that are handy. We don't have anybody in the Army; we are too old,

I guess, to have to go in the Army and too young to have anybody die. We have obstetrical nurses to help us in our county. First we had one, then we got two, and now we have a third one. The TVA brings a lot of increase in our population.

Every member regularly attends our meetings, and the Auxiliary and Health Department nurses meet with us every time we have a meeting.

SECRETARY McCORMACK: I think we ought to make particular note of the extension of the power activities of the TVA in the increase of population in Marshall County.

#### MASON COUNTY

O. M. GOODLOE, Maysville: Mason County has 14 eligible physicians; 10 of them are paid-up members. We lost not a single member by death or to the Army. We have had nine regular scientific meetings which were both interesting and instructive. One of them was also a joint meeting with the dental society. All of the meetings are held in the offices of the County Health Department, with which the Mason County Medical Society has cooperated since 1917.

#### NELSON COUNTY

W. KEITH CRUME, Bardstown: There are thirteen doctors in Nelson County, eleven of whom are members of the County Society. We have had one regular meeting in the past year but more meetings will be planned for the coming year and we intend to have this one of our banner years of the society.

#### PULASKI COUNTY

CARL NORFLEET, Somerset: This is the report of the secretary, M. C. Spradlin.

The Pulaski County Medical Society has 21 paid members for 1941, of whom one has died and two are on extended active duty with the U. S. Army. The society has paid from its funds the dues to the State Association for 1941 of the members on extended active duty with the armed forces.

During the year the society has discontinued participation in a joint plan with the Farm Security Administration for a medical cooperative, after eighteen months' trial, as the physicians were paid less than 60 per cent of their bills.

The society is continuing its policy of acting as host to a joint meeting of the Sixth and Seventh Councilor District each fall.

#### TAYLOR COUNTY

C. V. HIESTAND, Campbellsville: Gentlemen, Taylor County has only a handful of physicians, about seven. Six of them are

members; one is retired. We get along harmoniously. We haven't had any epidemics worth mentioning outside of the diseases of childhood. We had a right smart little endemic of measles in the spring, and pertussis, and I think lost two or three children from bronchial pneumonia following it.

We meet pretty regularly. We don't meet around August. The majority of us generally attend the Muldraugh Hill Medical Society meetings; we also attend some Councilor District meetings. I find the doctors in Taylor County are like other doctors and like the Army—they travel on their stomachs, more or less.

We have a little hospital down there with about eight beds. We can do almost anything down there at that hospital, from ingrowing nails to cesarean section, and they are having fine luck with their operations. I don't do any of the operations, but we have a man down there who takes out all the appendices. I think tonsils are becoming extinct in that country, and in the next two or three generations I don't think the babies will have any tonsils, or any appendices, either.

#### UNION COUNTY

BRUCE UNDERWOOD, Morganfield: Dr. Vaughn was sick and had to go upstairs for a few minutes. As secretary of the Union County Medical Society I will make the report. We have 17 doctors in the county; one of them is retired; two are non-members; two have recently been declared honorary members, leaving twelve paid-up members.

There are three features of the society in Union County that are worthy of mention. The first has been in existence for a long time. That is that we always have a meal when we have a meeting. The other two have been copied from other societies. The first of those is that whenever we have a meeting we always try to have an outside speaker. We have copied that largely from Harlan County and Dr. Bailey. That does an awful lot for their society and it has done a lot for ours. We have copied another feature just recently from Dr. Frazer. He didn't mention it in talking about the 4-County Medical Society. We have taken the dentists into the medical society. We have only 12 paid-up members. We have only five dentists. When we put them all together we have a pretty good society. We consider those dentists as doctors specializing in dentistry, and we believe that is a forward step.



Last week the society voted to make application for a hospital under the community facilities there. We have a full-time Health Department there and hope to have a health center down there. We are getting along pretty well and have regular meetings each month.

#### WEBSTER COUNTY

A. B. COLLEY, Dixon: The doctors in Webster County just won't meet, so when I get ready for a medical meeting I go over and meet with our neighbors.

PRESIDENT GARY: Next is the report of the Delegates to the American Medical Association.

#### REPORT OF THE DELEGATES TO THE A. M. A.

J. DUFFY HANCOCK, Louisville: This is a joint report of two of your three Delegates, on the proceedings of the House of Delegates of the American Medical Association at the 92nd Annual Convention held in Cleveland, Ohio, June 2-6, 1941.

Those of you who are interested in the details of the proceedings of the House of Delegates of the American Medical Association can read and study them in their entirety in the several issues of the JOURNAL of the American Medical Association immediately following the meeting. This report will record some of those details but will deal principally with an interpretation of the trends observed and the policies discussed.

The Distinguished Service Award of the American Medical Association was bestowed, by ballot, upon Dr. James Ewing of New York City, a most worthy choice.

In his address to the House, the Speaker, Dr. H. H. Shoulders, emphasized again the democratic form of government under which it operates, saying, "Trick parliamentary procedures may have a place in political assemblies but not here." He reminded the Delegates that they represented not the pecuniary interests of the medical profession, but its ideas and ideals, realizing that we physicians do not own but rather serve as trustees for the science of medicine. In a consideration of the problems to be presented, he urged that they be viewed with expected integrity, wisdom, charity and vision.

The Speaker then followed the memorial custom of calling the roll of those who had served as Delegates or Officers and had died since the meeting of June 1940. Of interest to you are the names of Louis Frank, John G. South, and Carl Louis Wheeler, all of whom had represented our state, and William Allen

Pusey, that distinguished native Kentuckian who achieved his fame while residing elsewhere.

Dr. Nathan B. Van Etten in his presidential address speculated upon the great possibilities ahead in medical advancement, and urged the continuance of formal and informal postgraduate instruction as a necessity for keeping in step with this progress. He concisely stated the essence of the platform of American medicine as favoring centralization of national health functions and decentralization of individual sickness under local control with free choice of physician by the patient. He recommended the establishment of a National Department of Health to be headed by an officer of cabinet rank. Dr. Van Etten criticized the mud-slinging of the press and other sources which sought to discredit the American Medical Association, and urged that an effort be made to correct these false impressions and arouse, instead, an appreciation of the democratic nature of the Association and the painstaking work of its officers. In closing, he cited the fact that the survey of the Committee of Medical Preparedness had revealed that 95 per cent of American physicians had expressed a loyal willingness to support the military services of the United States when and where they may be needed, which should well disprove any claims of discord within the ranks of medicine.

Dr. Frank Lahey, President-Elect, discussed the severe strain imposed by the duties of the presidency of the American Medical Association and suggested more consideration of the health of the President and the paid executives at Headquarters in Chicago. He emphasized the importance of having some young men in the House of Delegates and on various important committees so that they might develop their interest and value in the organization side of medicine. He complimented the American Medical Association, the American College of Surgeons, the American Hospital Association and the specialty boards for their efforts to provide better medical care. The keynote of his address was a plea for national unity. While realizing the unjust attitude of the Government towards organized medicine and yielding none of our prerogatives, he urged that during the present emergency, suits, privileges, personalities, and personal opinions be relegated to places of minor importance.

The Secretary reported a membership of 118,441 as of April 1, 1941, the largest

number of members ever reported to the House of Delegates.

The report of the Board of Trustees is too voluminous to consider in any detail. Even glancing through it, however, will give an amazing view of the scope of work accomplished by that group. The one item of interest to all was a report by the Board of Trustees on the indictment and trial of the American Medical Association and its officers. The proceedings from the start were outlined, and the latest decision, as you know, was acquittal of the individuals and conviction of the Association. By unanimous vote of the House of Delegates the Counsel for the American Medical Association was directed to appeal this judgment. Our President-Elect, Dr. E. L. Henderson, is a member of the Board of Trustees and may have something to say about this verdict and other activities of the Board.

Another matter of great effect on all of us was the report submitted by Dr. Irvin Abell, Chairman of the Committee on Medical Preparedness. The results of the survey were most interesting and the suggestions made of vital importance. Since Dr. Rankin, another member of the Committee, is to present this matter in person Wednesday night, any discussion on our part would be useless repetition.

The House of Delegates is not a rubber stamp body. It showed this year as well as last a proper aggressiveness for the care of the sick, for the support of national defense, and for the advancement of medical practice. This was evidenced by the type of resolutions introduced and the discussion of reports of the committees to which they were referred. State medicine was as unpopular as ever.

An appreciation of the importance of the role of the general practitioner was emphasized in several ways. A new Section on General Practice was created; some control of the specialty boards was suggested; and the rights of the general practitioner in regard to hospital practice were affirmed.

St. Louis was selected as the meeting place in 1944 following Atlantic City next year and San Francisco in 1943.

Our State Society was again honored by having one of its members, Dr. Fred Rankin, of Lexington, chosen as President-Elect of the American Medical Association.

It has been a privilege and a pleasure to represent you in the House of Delegates. Any instructions you may care to

give or any resolutions you may want introduced will be followed or presented as you direct.

E. L. HENDERSON, Louisville: Mr. President and Members of the House of Delegates: There are just one or two items that Dr. Hancock did not speak of which I wish to mention.

In regard to the trial of the American Medical Association, as you all know, at the present time the American Medical Association stands convicted. On October 9 this question of appeal will be argued before the District Court of Appeals in Washington. The Board of Trustees of the American Medical Association has no alternative; if we cannot get justice before the District Court of Appeals, we are going to take it to the Supreme Court.

One item that might be of interest to you is that the entire proceedings of the trial and the editorial comments from all over the country have been published in the form of a book and will be ready for distribution within the next few weeks. It is going to be the policy of the Board to send one of these books to every state society. Any one wishing a copy of the book can purchase it probably for a few dollars.

Another item that I wanted to call your attention to was that of membership. As Dr. Hancock stated, never in the history of the American Medical Association have we had such a large membership, and within the past three years that membership has grown from 108,000, approximately, to better than 118,000. Since the agitation of socialized medicine or state medicine, or whatever you want to call it, has been so prominent, the membership has gradually increased. I think that that alone shows that the American medical profession is united today as it never has been united before.

Another item that Dr. Hancock did not mention on which I want to speak for a minute is the Section on General Practice. For a good many years there has been considerable dissatisfaction from all sections of the country among the general practitioners. They claim that they come to the American Medical Association and they don't know where to go; they pick out a paper in one section that they want to hear, and maybe that conflicts with a paper they want to hear in another section. For that reason, this next year we are having a trial section, I may say, on General Practice, and if that works out



satisfactorily, in the future we will have a Section on General Practice, which I think is a most excellent idea.

PRESIDENT GARY: Is there any other discussion? If not, we will pass on to the next subject, which will be the report of the Committee on Medico-Legal Questions, by Dr. Lukins.

#### REPORT OF THE MEDICO-LEGAL COMMITTEE

J. B. LUKINS, Louisville: Each year, just after our annual report, we are so impressed with our thorough organization, the inclination of every member of the profession to cooperate, and the implied resolve of each doctor to exercise greater care in the handling of his cases and greater tact in dealing with people; we are impressed, I say, so much that we almost believe that in the coming year there will not be a single malpractice suit.

It is not long, however, until human nature begins to reassert itself. Patients become dissatisfied, doctors become jealous, and lawyers begin looking for business, and before the year is out we have at least the average number of suits.

The type of cases leading to the suits, however, seems to be changing somewhat. Medical practice, as well as all modern life, is becoming more complex, and different angles are presented for our solution. A child dies three or four days following tonsillectomy in a mountainous county, and an eye, ear, nose and throat specialist is indicted for man-slaughter. This, of course, in that particular county was only the political way of leading up to a malpractice suit. Neither the Medico-Legal Committee nor the insurance company, strictly speaking, has anything to do with a manslaughter charge, but due to specific circumstances in this case we have jointly undertaken the complete defense.

The medical defense committee has in all cases viewed the evidence from the angle of the attending physician. In other words, we assume that every member of the Kentucky State Medical Association is innocent until proven guilty, regardless of the glaring charges. In the last few years, however, there have been a few suits that did not seem altogether unjust. It is not only difficult, but it is not fair to the noble and selfsacrificing members of this organization to defend a case that has been marked by ignorance and carelessness.

For the most part, from a scientific standpoint the medical student is being

better trained in the United States than ever before, but we venture to make one or two suggestions to the authorities in our medical school. If a more thorough course were given to the senior class in medical ethics, some of the pitfalls and dangers to which they are now subjected would in all probability be avoided. There are many medico-legal aspects in the practice of medicine. One of our doctors was sued this year for testifying in a civil suit that he had previously treated the injured man and stating the condition for which he treated him. This resulted in a suit for damages against the doctor for revealing confidential information as between doctor and patient. More direct teaching in medical school will give the young physicians a clearer understanding of their rights and privileges as well as their limitations in practice.

One more thing: The x-ray is accepted universally as an essential means of modern diagnosis and treatment. If a young doctor is located outside of one of the larger cities of the state, he must almost of necessity have his own x-ray equipment. To a great extent, he must operate this himself and interpret the films. It is therefore essential that more hours be devoted to the teaching of radiology in the medical schools. Otherwise, we have men who are improperly trained using the x-ray and therefore endangering their patients and subjecting themselves to the liability of a damage suit.

During the past year there have been any number of threatened suits. Many of these required expert legal handling to avoid their being filed. Eight new cases have been filed since our last report. I want to say that that is the fewest number we have had in nineteen years. With these, we have at the present time thirteen suits pending in the courts. Two of these are in the Court of Appeals.

Two cases were dismissed by the court without coming to trial. Three were settled out of court and two were won at jury trial.

We would remind the profession that the license of every doctor in Kentucky must be registered with the county clerk in the county in which he desires to practice. The records show that in many instances this has not been done, and, of course, where it is neglected, the doctor is illegally practicing, and therefore has no defense in a case of a malpractice suit. This is very important, and I would like

to ask each delegate of this Association to see that it is attended to in his own county.

I often think that my reports fall, for the most part, on ears that don't need to hear these sentiments. It is a good deal like the Methodist and the Baptist prayer meeting; the fellows who ought to hear the talks are not there. I would ask every member this year to act as a missionary and to go back to his county and talk to the fellows who don't belong to the county society, those who never attend a state meeting if they do belong, and tell them the points that I have mentioned in this paper. In this case, as in every other, an ounce of prevention is worth a pound of cure. Our report plainly shows that our educational program that we have been working so hard on and that you all have so loyally supported for fifteen or eighteen years is really bearing fruit.

Our report would not be complete without expressing our gratitude to Mr. L. R. Curtis, the attorney for the Medico-Legal Committee, whose cooperation is always wholehearted and whose advice has enabled us to conduct this work so successfully.

We also wish to thank the physicians of the state who have been of great assistance to this committee by offering their services in the defense of malpractice suits, and better still, by maintaining the standards of our profession so that these cases can be prevented.

SECRETARY McCORMACK: Mr. President, as a member of the committee, there is one matter that I would like to call to the attention of the House of Delegates that seems to me to be very important at this time.

There is a very distinct tendency on the part of those of us who are members of the profession to delegate more and more of our duties as practitioners of medicine to our subordinates, and I think the profession should be warned that where they permit nurses or technicians to perform delicate procedures under their instruction and supervision, if any accident occurs they have no defense under the decision of our Court of Appeals because the doctor is entirely responsible, for example, for a transfusion. I am informed by those who are familiar with them, that transfusions have become so simple that anybody who used to be able to give an enema or a douche can give them. I don't believe a word of it, but

that is what I am told by people who have these things done in hospitals. If a nurse gives a transfusion under your instructions and one of those accidents occurs that occurred in my own practice, you have absolutely no defense against a malpractice suit under the decision of our Court of Appeals, and I think the profession ought to take that into consideration.

In addition, a nurse performing any duty that is the practice of medicine violates the Medical Practice Act and renders herself liable to prosecution for that malpractice—that is to criminal prosecution. This is a matter that you know a great deal more about than I do because I don't come in contact with it, but it is a tendency that seems to be developing with such rapidity; courses are being given now in many institutions all over the country for nurses to give transfusions and to do other delicate procedures that require a great deal of knowledge, a great deal more knowledge than I believe is being taught to nurses. If the profession desires to do so, of course it can make the arrangement and carry the procedure to its logical conclusion and this Section on General Practice that Dr. Henderson has told us is developing will be occupied by nurses and the doctors will be giving the general practitioners instructions as to what to do. The question is whether we want to retain control of the house of medicine or whether we want to give it away.

JOHN W. SCOTT, Lexington: Mr. President, I have a feeling that Dr. McCormack has rather the wrong point of view on that subject. I won't say as to the technical responsibility under the law; he no doubt speaks by information on that; but as to the matter of nurses or technicians doing technical things, I cannot agree with him that we are giving up the birthright of the doctor in having a technician do a technical thing. Dr. McCormack goes on the assumption that everybody who has attained the degree of Doctor of Medicine is per se capable of doing anything in the category of practice, which certainly would be a very violent assumption. I think there is everything to be said for nurses or technicians giving intravenous injections; I won't say transfusions—perhaps they need more detailed observation. But I think a great many of the things that heretofore the doctor has felt had to be done by a doctor are better done by the nurse, and the exigencies of prac-



tice today require that they be done by somebody else than a graduate in medicine. I sincerely hope the decisions of the court will justify what is plainly to me a proper and efficient procedure.

J. B. LUKINS, Louisville: Mr. Curtis is back here. I would like to hear a word from him.

L. R. CURTIS, Louisville: I thoroughly agree with Dr. McCormack that the physician is liable under the law for any mistake made by his technician or nurse. That question was decided probably fifteen years ago in a case that came up in Campbell County where a nurse failed to make the proper count of sponges and the Court of Appeals in that case held that the operation started when the incision was made and ended at the time the closure was made, and if the nurse failed to count the sponges correctly the doctor was liable. That is the case of Pratt against someone, I have forgotten the name of it now. So the doctor is correct in that.

If the nurse is employed by the hospital, not by the doctor, the doctor is not responsible unless the work of the nurse is done under the personal supervision of the doctor. For instance, if the doctor prescribes that a hot-water bottle must be used and the nurse takes the patient into a room and fills the hot-water bottle and places it too close to the patient or the water is too hot, the nurse being employed by the hospital, unless the doctor owns the hospital, he is not liable at all.

I believe that Dr. Lukin's report is so important that it should be read to the entire convention in order that the doctors who don't attend the House of Delegates may know just what his report is and have the benefit of the valuable suggestions made by Dr. Lukins.

I want to close by saying that we do have a great many suits out in the state; we have very few here in Louisville. I know you won't think I am boasting at all when I say that a doctor hasn't lost a suit in Louisville, during the last ten years, and that is by reason of the splendid cooperation of the Medico-Legal Committee, of which Dr. J. B. Lukins is Chairman, and not only does the Medico-Legal Committee cooperate fully in every case where it should cooperate, but the doctors generally in Louisville cooperate, and by reason of that fact we have made a good record in Louisville.

Dr. Lukins mentioned the case where a doctor was sued because he had testified against his client in an accident case. You know, we have Section 606 of the Civil

Code of Practice that provides that communications between a lawyer and his client or communications between a preacher or priest and his parishioner are privileged. That doesn't apply to a doctor. There is another section in the statute among the sections in relation to the Bureau of Vital Statistics that enumerates the duties of the doctor in rendering service under that Bureau, and it goes on to say that nothing in this section shall be construed as meaning that any communication between a doctor and his patient is privileged. Based upon that section, we did have a suit in Kentucky, in Louisville, where a doctor was sued because he testified to the truth against his client in an accident case. The patient sued the doctor. The court here held that there was no cause of action against the doctor in that case, which was confirmed by the Court of Appeals. So physicians in Kentucky do not come within the purview of the Bureau of Vital Statistics, nor may not be sued if they go into court and testify as to what they found wrong with the patient.

I want to say again that I appreciate the splendid cooperation of Dr. Lukins and the Medico-Legal Committee as well as the cooperation of the other physicians in Louisville as well as the physicians generally in the State of Kentucky in helping us to fight and win the malpractice suits.

W. B. ATKINSON, Campbellsville: I have two questions I want to ask, Mr. President. Often in court we are asked if the man we treated was drunk. Are we required to answer that or not?

MR. CURTIS: You may tell the truth about that, Doctor. If he was drunk, say so; if he wasn't, say so. I remember twenty years ago someone said Teddy Roosevelt was drunk, some paper up in Detroit. He sued and that case never came to trial because it was compromised and dismissed, but the court there held that if you say a man is a drunkard and it isn't true you slander him, but be careful about that. You can just say, "In my opinion he was," and give the reasons. If you tell the truth about it you don't hurt him.

W. B. ATKINSON: I am talking about a patient that you have treated.

MR. CURTIS: You have a right to testify to that if that is true, or you have a right to testify to any other condition you find.

PRESIDENT GARY: Do you have a right to refuse to testify?

MR. CURTIS: No. The court will make you testify.

W. B. ATKINSON: How about nurse anesthetists?

MR. CURTIS: If a nurse is employed by you and she makes a mistake, you are liable for it. If she is your agent, that is based on agency and you are liable for it. If she is employed by the hospital and her work is not done under your direction, in other words, if you are not there and you say, "Do it this way," "Do it that way," you are not liable unless it is done under your personal supervision.

J. B. LUKINS: Unless it is a privately owned hospital.

MR. CURTIS: Unless it is privately owned. If you own it privately you are responsible because she is your agent.

R. E. SMITH, Henderson: If you are called to testify to a previously existing condition where a venereal disease existed, do you have to testify?

MR. CURTIS: Yes, you do.

R. E. SMITH: If that is not pertinent to the question and a shrewd lawyer is trying to pull down the character of an individual and he has brought the medical profession in there to do it, what rights have we?

MR. CURTIS: If it isn't pertinent, the lawyer on the other side should object to the question and ask the judge to sustain the objection, but if the judge overrules the objection and tells you to testify, you must testify.

R. E. SMITH: Those of us who have been in court know that if you get that over to the jury, what the judge says isn't worth the snap of your finger. Time and again I have gone and qualified as an expert witness and made the following statement: "I will tell the truth and nothing but the truth and as much of the truth as the attorneys and the judge will allow me," because they will cut you off. There is where you can slip it in and shoot it, and you settle the case and win it. I saw one lawyer browbeat one lawyer and three physicians and then he got me up there. I think he asked me 156 questions. I have never answered them yet. We just went around. I prefaced all my clauses with "if." The judge afterwards told me that I wouldn't have had to do that at all, that it was a personal matter that was degrading an individual and therefore I could have refused to answer it.

MR. CURTIS: I think the lawyer on your side should have objected to the question on the ground that it was incompetent, irrelevant and immaterial.

R. E. SMITH: He did.

MR. CURTIS: And the judge would not uphold him?

R. E. SMITH: That is right, and told me afterwards it was not necessary.

MR. CURTIS: Had the judge overruled the lawyer on your side and told you to answer, you would have a perfect right to answer.

R. E. SMITH: Yes, but he told me afterwards that I did not have to answer.

MR. CURTIS: I can't understand that.

R. E. SMITH: I told him, "If you read the records I am afraid one of us is mistaken."

MR. CURTIS: Yes, I think the judge was wrong. If he told you to answer and you didn't answer, he would fine you for contempt of court.

R. E. SMITH: When he knew he was wrong and admitted it, then he said it would have been all right for me not to have answered.

MR. CURTIS: I think the judge was wrong about that.

SECRETARY McCORMACK: Mr. President, in reference to Dr. Atkinson's question about the nurse anesthetist, under the law we hold examinations for nurse anesthetists. If they are certified they are responsible, for they are legally anesthetists and there are a great many in the state. Most of the hospitals are taking advantage of that and the nurses are registered as anesthetists, because under the decision in the Hatfield Case the surgeon was held responsible. It was stated that the surgeon would be responsible for any accident that happened, if anesthesia was being given by a nurse or a layman or anybody else. The law was amended so as to provide for the registration of anesthetists as the result of that action.

CARL NORFLEET, Somerset: About a year ago in our county a trial was brought forth in which a man had been injured by a truck striking him. He was x-rayed. An offer was made to settle with the man for \$100 a month for the time he had been off and close the case. The man would not settle. When he came to trial there were three chiropractors that testified that he had a broken coccyx that was very much out of line. There were two doctors and three chiropractors. The man could have settled all told for \$1,700, or was offered that, and the jury gave him \$5,000 based on the testimony of those chiropractors.

T. A. FRAZER, Crittenden: In the State



of Ohio recently a civil service man brought in a couple of those people to testify and the judge ruled they could not testify, they were not physicians. I think most of the judges in Kentucky would do the same thing.

Lawyers look back for precedents; they are not looking into the future at all; they are looking for precedents to guide them in their work. We doctors have to do our work at the bedside. We don't have time to look up authorities. We have to try to save lives. One judge will rule one way, one another.

I was a witness in a rape case recently. There was a question about a woman being raped. On cross-examination the defense attorney, trying to break down this girl's character, asked me if this girl had gonorrhea, and the Commonwealth objected. There was an argument and the judge ruled that I had to answer that question. Then he asked me again if I knew when she contracted gonorrhea, and I testified that the hymen was freshly ruptured, there were fragments of it, and she was bleeding, that there were several wounds about the vagina, and that she had been beaten and choked and was black and blue all over. Then the defense attorney came back with the same question: Whether she had gonorrhea before she was raped or not. The judge made three or four rulings on it and finally said, "I don't know anything about it, you lawyers fight it out."

R. E. SMITH, Henderson: Hasn't a chiropractor the same right in the courts of Kentucky as a physician?

MR. CURTIS: The chiropractor may testify, and chiropractors do testify here all the time, but my experience has been that the court doesn't pay as much attention to the chiropractor as he does to a medical doctor.

R. E. SMITH: I mean the law.

MR. CURTIS: Oh, yes, the law. They have a right to testify.

R. E. SMITH: That is our fault.

MR. CURTIS: That is right; they do testify.

W. B. ATKINSON, Campbellsville: I move the report of the committee be accepted.

The motion was seconded and carried.

PRESIDENT GARY: Next is the report of the Committee on Medical Economics. Dr. Simpson has sent in a request for a meeting of that committee at five o'clock, and that will be passed until tonight.

#### REPORT OF THE AUDITING COMMITTEE

F. M. TRAVIS, Frankfort: Dr. Hudson, the Chairman was called out and asked me to give his report:

The following is a report of the Reference Committee on Auditing, composed of Drs. F. M. Travis, John E. Kincheloe, and Richard T. Hudson, Chairman.

This committee has carefully examined the report of the Treasurer, Dr. A. W. Davis, which was audited by Hermerdinger and Dennis, Certified Public Accountants, and finds no additions nor corrections.

This report covers the period from September 1, 1940 to September 1, 1941.

A. J. BEAN, Brewers: I move it be accepted.

The motion was duly seconded and carried.

PRESIDENT GARY: Report of the Committee on Report of the Council.

P. E. HARPER, Dry Ridge: I believe I am the only member of our committee present. We have had only a short time to have this report in our hands. I now have a copy of that report, and I would like to beg your indulgence until at least another member of our committee shows up so we might have a meeting on this report.

PRESIDENT GARY: If there is no objection that will be passed.

PRESIDENT GARY: Report of the Committee on Technical Exhibits, Dr. V. A. Stilley.

V. A. STILLEY, Benton: The technical exhibits are in the South Room. I hope you all will see them. The technical exhibitors have been selected this year from the largest number of applicants that have ever applied for permission to make technical exhibits at the sessions, and we have been particularly careful in weeding out all those who have had any product that should not be exhibited, and we hope you will see the exhibits and sign their cards and request their services that are given to you gratis and then give them preference, because they are the advertisers in the JOURNAL and help to support it and to support these meetings.

Report of the Committee on Scientific Exhibits, Dr. W. O. Johnson.

#### REPORT OF COMMITTEE ON SCIENTIFIC EXHIBITS

The Committee on Scientific Exhibits for the Kentucky State Medical Association wishes to make the following reports for the year 1941:

Through the hearty cooperation of all the participants and the excellent work of the J. T. Griffin Company in modeling the booths, twenty-two scientific exhibits were presented at the Louisville meeting. We are very pleased with the high type of exhibits submitted and feel that they are in keeping with the standards of previous years.

Respectfully submitted,

A. J. Miller

Rudy Vogt

Joseph Bell

Gordon Buttorff

J. M. Kinsman

W. O. Johnson, Chairman.

I hope very much that everybody will study these exhibits, because they represent a real postgraduate course in the various subjects in which exhibits have been made.

#### REPORT OF THE COMMITTEE ON MEDICAL ETHICS

R. EMERSON SMITH, Henderson: Mr. President and Members of the House of Delegates: This part of the world's history through which we are passing shall stand out in the years to come, regardless of the changes that war has produced as far as the map of the world is concerned, as the period of the greatest upheavels in man's existence in regard to social, financial, industrial, moral and religious thought. The readjustment following this world conflagration is going to challenge the ability, ingenuity, mind, strength, physiological and mental and moral, and the soul of civilized man as it has never been challenged before. It behooves the members of the oldest profession in the world to look ahead, and to do so we must take an inventory of the past. We must see the mistakes that have been made in the standards and ideals, and they must be corrected. As far as we are able, we must look to the future and try to visualize the changes that are before us. We must set our house in order so that we may continue to hold the place that has been willingly and generously accorded our profession throughout the ages. We must hold to those ideals that are just, honorable and unselfish, and not give up the great principles that have controlled our actions from Hippocrates to our present day.

The inevitable changes that are bound to take place in the years that follow this cataclysm of civilization will bring with them changes in standards of morals and ideals. Many will present themselves in an

innocent and insidious manner. Ideals will be scoffed at and ridiculed. There will be times in which legislation will be evoked to bring pressure to bear on standards and practices which can be controlled and governed only by the high ideals that direct the actions of the individual members of the medical profession. Such changes as lower the ideals which govern and control the conduct of the medical profession must be met, turned back, and not allowed to make inroads into the moral ethics that has controlled and guided the actions of our profession throughout the ages. Our Code of Ethics is simple, clearly stated and easily understood by all who know it. It is based on the great human rights of men, embodying those great cardinal virtues of sincerity, justice, truthfulness, kindness and love for all men.

We have never had to be pushed. We have always led with courage, determination, gentleness, patience, and without flares of trumpets. With assurance and confidence we have striven to give to mankind, without profit, the fruits of our knowledge and of our endeavor. Conditions under which we are living are extremely complex and they are growing more so daily. But these complexities will fade into insignificance when the readjustment period sets in after the democracies and the free men of the earth exterminate the vermin that is spreading over the world, vermin that is more deadly than the Black Plague of London, of typhus, or of smallpox in the Middle Ages, for this vermin is striving to destroy the moral and spiritual fibre of mankind. This virus which was concocted in the minds of villains with a Machiavelian shrewdness and inoculated into the nations of the earth with the viciousness of a Catherine de Medici will be stopped but its effects will be with us and it will leave its mark on civilization for generations to come as poliomyelitis does on its victim, and it will leave mankind in a mental and spiritual condition with warped ideas, fears and distrust that are as real as the paralysis that follows apoplexy.

Standards change in every generation, ideals vary with the standards of living, of culture and of religious training. We feel that the time has come for us to review some of the standards that now exist in medical ethics, not that they have failed to serve their purpose, not that they are not based on sound ethical principles, but do we not need a different interpretation in many instances? Due to the high



specialization that has taken place and which is absolutely necessary in the medical profession, and with the constant encroachment of Federal and state medicine, is there not an injustice being wrought against a large number in the medical profession?

This brings us to the ever perennial question of splitting fees. We do not approve of this practice, but our approving or not approving of it as individuals or as a body has not had very much effect on this "unethical" practice in our profession. It reminds us of what Mark Twain said about the weather: We are all talking about it, but nobody seems to do anything about it. There is a basic principle of fair play that underlies and controls the actions of most men. There is a comradeship, a friendship, and an understanding that exists between the members of the medical profession that we do not feel exists to such an extent among any other organized group of men. We feel that, in most instances, fee-splitting is not so much an act on the part of the specialist to obtain the patronage of the practicing physician as it is a feeling on the part of the specialist that the physician referring the case to him should receive some of the reward. The public is far more willing to pay for a surgical operation than for a case of typhoid fever or pneumonia, although the practitioner has become far more exhausted, has spent a great deal more time and energy in treating the case than the twenty minutes required to remove the appendix.

Legislation and regimentation are not going to change this practice. It has failed in the past, it will continue to fail in the future. Why not adopt a uniform standard of percentage based on the fee received? In this way, remove the opprobrium of fee-splitting and every specialist or surgeon would have the same opportunity of receiving the patronage of the practicing physician and would not be able to say that the reason that he does not have as much surgery as So-and-so is because he does not believe in fee-splitting. Another practice that exists in the medical profession and which is lowering its standard is the unethical advertising of institutions and individuals which is practiced by some members of our profession. We do not wish to imply that this is done with any malicious intent and ulterior motives, but it is placing us with a group of "healers," men whose training and qualifications are far below that of the doctors of medicine

and who are neither capable nor competent to undertake the treatment of the diseased human body or mind. Here, again, we feel that a plan should be evolved by which the community may have access to the qualifications of the medical profession in city, town, or county. New members entering a community should not have to depend upon hearsay or upon the recommendation of other individuals who are not qualified to express their opinion on the ability of the various members of the medical profession in that locality. This knowledge is a crying need of every community in our state and it falls to the medical profession to see that the public may obtain this information whenever necessary.

This can be done by having our telephone directories incorporate a page, or as many pages as may be necessary, giving the names of all the physicians in the community and their special branches of medicine. I have been told by several individuals that this is already done. Gentlemen, if you have any telephone directory in which the names of all physicians are classified, and what their specialties are, I'd like to see it. That thing has been thrown back at me two or three times, and I have gone down the line to find out. It is not published except in portions of New York City, according to the Bell Telephone Company.

The county medical societies can periodically issue in the newspapers such lists. You notice I state the "county medical societies." Other means can be devised by which this information may be had by the public and all of this information should be under the supervision of the county medical societies. We have heard repeatedly the criticism made by the thinking public that they have the right to know whom they should call when they move into a community and wish to consult a physician. This is a problem which we must face, and with the large fluctuation of population that is taking place because of our defense preparations, some means must be evolved to meet this ethical barrier which has become an ethical injustice to the public, and some members of our profession by individual group advertising are taking an unfair advantage of their professional colleagues.

We have mentioned the two most common instances of what we might term ethical irregularities. The attention of the

committee has been called to certain other practices which tend to further lower our standards and to make us liable to legal prosecution, namely, the only too frequent habit of physicians allowing nurses and technicians to give transfusions, intravenous medications, and certain serums. The attention of the committee has also been called to the frequency with which nurses and hospital attendants render first aid treatment, such as sewing up wounds, et cetera. We have an instance in which four clamps were placed in a rather large gash on the dorsum of the right hand. The next day the individual presented himself to a physician and stated that after the accident he had had his hand sewed by a nurse, but had discovered that he could not raise the index and the middle fingers. Mistakes of this nature cannot be condoned or excused.

The medical profession is laying itself liable to just criticism when these so-called "simple procedures" are relegated to nurses and technicians, and are not at least properly supervised by a graduate physician. Grave reactions may occur with any intravenous medication, and if proper precautions are taken in questioning and examining the patient and in ascertaining whether idiosyncrasies exist, the knowledge of Asthma or reactions having followed previous medications will prevent a large number of so-called reactions. Because the nurse or technician is skilled in the *modus operandi* by no means leads to the conclusion that they are capable in handling reactions that may occur during or after such medication or that they have sufficient knowledge as to whether such a procedure should be undertaken or not.

It is not the purpose of this committee at this time to render an exhaustive report on non-ethical practices that occur from time to time. This committee feels that the Kentucky State Medical Association should appoint a permanent Committee on Medical Ethics, and suggests that the unethical irregularities that occur from time to time be brought to the attention of this committee and that it in turn present them to the House of Delegates. We also recommend that the duty of this permanent committee shall be to try to evolve means by which the physician may justly avail himself of all right and honorable methods of practicing his profession, means by which he can ethical-

ly compete with the charlatan and other so-called members of the healing art, without detriment or injury to himself or to a fellow-practitioner, and without lowering the high moral standards that control his actions, and that he shall be accorded the inalienable rights to practice his profession without regimentation or hindrance which will control his liberty and that of the public and place him under supervision other than that which directs and controls his profession.

Respectfully submitted,

Committee on Medical Ethics:

W. W. Nicholson

O. A. Gray

R. Emerson Smith, Chairman.

PRESIDENT GARY: Dr. Smith's report is now open for discussion. If there are no questions or suggestions, the report will be filed.

SECRETARY McCORMACK: Mr. President, I note that it is twenty minutes to six. Under the provisions of the program we convene at seven. I move that we recess until seven o'clock.

E. K. MUNN, Jenkins: I have a short report of the Committee on Industrial Health which I should like to present as I shall not be here tonight.

SECRETARY McCORMACK: I will withhold my motion for adjournment.

E. K. MUNN, Jenkins: We wish to apologize for not having had the opportunity of meeting together before this morning, mainly due to the fact that I have been on this committee just a short while and had no opportunity to get the committee together until this morning.

The Reference Committee on Industrial Health, consisting of Drs. F. P. Strickler, Virgil Skaggs, and your Chairman, met with Dr. C. M. Peterson, of the American Medical Association, and wishes to report that it has conducted a preliminary discussion of the many aspects of industrial medicine, surgery and hygiene, with particular reference to the professional and economic relationships within the profession, both in general and the special fields of practice.

This Committee recommends that it be continued in order that further study be made of the many ramifications of this field following periodic meetings at which it is particularly requested that elected officers of the State Medical Society meet with this Committee in Dr. McCormack's office to formulate a complete industrial



medical program.

SECRETARY McCORMACK: I move the approval of this report, that the committee be continued, and that it be authorized to make special reports to the Council from time to time and that they be published in the JOURNAL as approved by the Council.

The motion was duly seconded and carried.

T. A. FRAZER, Crittenden: I move we recess until seven o'clock.

The Motion was seconded and carried, and the meeting adjourned at 5:35 p. m.

## SECOND SESSION

MONDAY EVENING, SEPTEMBER 29, 1941

The second session of the House of Delegates convened at 7:10 p. m., President Gary presiding.

PRESIDENT GARY: The House will come to order.

We will take up first the report of the Advisory Committee to the Director of the Division of Hospitals and Mental Hygiene, Dr. W. E. Gardner.

W. E. GARDNER, Louisville: Members of the House of Delegates: This committee was created three years ago by the House of Delegates and has been reappointed from year to year by the President of the Association. It has sometimes been referred to in the press as the Governor's Advisory Committee, but technically we are only serving in an advisory capacity to the Governor when he calls on us from time to time.

Our committee has met four times since the last annual meeting of the Association, twice in Louisville and twice in Frankfort. All of these meetings were attended by the full membership except Dr. Ernest Bradley, who missed at least two of these meetings on account of illness. He was in close touch with other members, however, and heartily approved all of our activities. All sessions consumed several hours of earnest and serious discussion of matters affecting the present and future welfare of our state hospitals and the Institute for the Care of the Feeble-minded, along with some consideration of plans for the development of a statewide mental hygiene program.

Our committee, as well as the entire Association and the state at large, suffered a tremendous loss on April 3 in the death of our beloved President, Dr. Austin Bell, who possessed unusual insight, ag-

gressiveness and sympathetic understanding of important problems which confronted the committee, and drove long distances through bad winter weather to attend two of our meetings, one in Louisville during the last Christmas holidays, and another at Frankfort the latter part of January. At the last meeting of the committee, a few days ago, we not only greatly missed the presence of this well-informed physician and delightful personality, but were deeply sensitive to the loss of his stimulating thought and wholesome advice. We are fortunate, however, to have as his successor on the committee and as President of the Association, Dr. W. E. Gary, who has been well known and highly regarded by most of you for many years and who is another outstanding Kentucky physician. We anticipate from Dr. Gary the same intelligent interest and capable performance on the committee that was so characteristic of his worthy predecessor. We are glad to report that Dr. Bradley has regained much of his former good health, but did not think it wise that he should attend what we knew would be a prolonged dinner meeting at our recent session. We trust that he was saving himself for the annual meeting of the House of Delegates and scientific sessions, along with other attractive features which are scheduled for the Louisville meeting.

In addition to the more or less formal meetings of the committee to which I referred, there have been individual conferences and correspondence with various members from time to time by the Director of Hospitals and Mental Hygiene, Dr. A. M. Lyon, who assumed office January 1, 1941, as the successor of Dr. J. G. Wilson, resigned. It is the unanimous opinion of our committee that Dr. Lyon has already demonstrated his ability to do a good job. (Applause) I shall request, Mr. President, that he speak to us briefly within the next few minutes and after I have finished this introductory statement. Dr. Lyon had had twelve years' experience in the state hospital service of Kentucky when he was appointed to his present position and had for several years previous thereto been rated as a psychiatrist by the U. S. Public Health Service. This was on account of long experience in the care of mentally defective children, and his publications regarding such problems and other related subjects, especially his interest in the promulgation of steriliza-

tion laws, more popular ten years ago, perhaps, than now, but still supported by some of our prominent sociologists and other philanthropic individuals.

At least some members of our committee have, within the past year, visited those institutions most accessible to them and have had called to their attention some substantial improvements that have been made in physical plants and equipment which had been too long neglected. There has been, furthermore, a sustained effort to improve the quantity and quality of professional personnel, including physicians, nurses, technicians and others, and some progress has been made. Unfortunately, however, the national defense program has seriously curtailed the number of suitable applicants, and many of the best of those already employed, especially attendants, have resigned to seek more lucrative positions. Even more serious is the fact that some of the younger physicians of these hospitals are being called to military service, and the Eastern State Hospital at Lexington lost two clinical directors on that account within less than two months. Further problems of this sort may be anticipated.

Time will not permit even passing reference to many innovations which have been made in various services at all the hospitals, and I shall mention only a few, assuming that Dr. Lyon will briefly discuss these or others which have attracted his particular interest, especially some important physical improvements which I cannot include, and some additions to the therapeutic program.

A full-time clinical director has been employed at the Institution for the Feeble-minded.

Additional physicians have been appointed at the Western State Hospital, bringing that staff up to its former numerical strength. A social service worker has also been employed at that hospital.

Registered nursing personnel has been increased at the Central State Hospital, and a full-time dentist has been employed at that institution; also, a librarian who has inaugurated a systematic reading program. The establishment of a training school for nurses at this hospital is being contemplated.

The Eastern State Hospital has had, for many years, an excellent consulting staff of prominent Lexington physicians, and it was at this hospital, more than fifteen

years ago, that malarial treatment of paresis was first instituted in Kentucky. This form of treatment was gradually extended to our other state hospitals and has been continued in all of them since that time. This hospital was, furthermore, one of the first in Kentucky to use electric shock therapy for the treatment of dementia praecox and some of the depressive anxiety states. It and our other state hospitals had formerly used metrazol and insulin shock therapy, and the latter is still employed in suitable cases. The Central State Hospital has, for some time, also employed electric shock therapy, the latter having been demonstrated to the physicians of all the state hospitals at Lakeland last fall during the time of the Psychiatric Institute which was held there under the sponsorship of the American Psychiatric Association.

Early this year, at the suggestion of Dr. Lyon, group therapy and habit training were begun at all of the state hospitals, and some outstanding results have been obtained.

The amusement program at all of the hospitals has been greatly expanded with the assistance of a WPA organization in addition to that already given by interested private citizens. Musical programs have been stressed, and the string band at Western State Hospital, composed of patients and led by an employee, broadcasts once a week over the local radio station.

Hydrotherapeutic equipment has been repaired and reemployed at both the Central and Western State Hospitals.

A training course for attendants has been carried on by registered nurses at all the hospitals.

A better clinical and statistical record system has been instituted in all the hospitals which enables the Director of the Division to have monthly reports of the movement of population and results of treatment, which should in time be a valuable asset in analyzing what progress has been made under an improved state hospital program.

Occupational therapy, one of the most important treatment procedures for the mentally ill, has been continued as heretofore, but with special emphasis on an effort to engage the patients in activities that are related to their former interests, but if these are not available other suitable tasks are substituted. Much stress has, furthermore, been placed on making the



personal appearance of the patients more attractive, and definite progress has been made in this regard.

The superintendents of all the hospitals have met with our committee on two occasions within the past year and they have shown a splendid spirit of cooperation with Dr. Lyon and are intelligently alert to the needs of their respective institutions. In fact, our committee looks upon them as the key men in the total state hospital situation, and we believe that their requests and recommendations should always be given valid and thoughtful consideration. They are, after all, the individuals who carry the burden of responsibility for the physical comfort and scientific care of the patients. The latter, as has been very appropriately stated by Dr. Lyon, are the most important people in our state hospitals, and their proper care and successful treatment must inevitably depend upon the number and efficiency of the personnel which the superintendents are able to obtain with the funds that are available. Better teamwork of all professional personnel has been noted since January of this year than at any time since the creation of our committee.

It is obviously not within the province of our committee to make specific recommendations for the expenditure of large sums of money for substantial physical improvements or construction of new buildings, unless requested by the Governor and the Commissioner of Welfare, but in accordance with such a request our committee has recommended that a receiving and hospital unit of at least 250 beds be constructed at the Central State Hospital, and that consideration be given to a similar unit at the Eastern State Hospital, if adequate funds should be available. Our committee, furthermore, recognizes the urgent, long-time need of a large expansion of facilities for the care of feeble-minded children, more than 500 of whom are reported to have either already been committed or placed on an approved waiting list for admission to the Institution for Feeble-minded at Frankfort.

Our committee wishes, especially, to thank Governor Johnson for the sustained interest which he has manifested in helping to provide more modern and scientific care of the mentally ill of Kentucky, dating particularly from the time he was President of the Kentucky Conference for Social Work some eight years ago, and

which interest has constantly increased as he became more familiar with the tremendous needs which confronted him when he took office as our Chief Executive. There has been much talk and some planning preceding his assumption of authority, but no large expenditure of funds which had materially relieved the state hospital situation. We are pleased to report that Governor Johnson has given notice that he has already transferred his entire biennial emergency fund to the Department of Welfare, all of which is to be expended on the state hospitals and the Institution for Feeble-minded. This is in addition to the regular appropriation. He has, furthermore, indicated that he will ask for additional state hospital appropriations by the legislators of the next General Assembly. He has personally attended three of our meetings within the past year, at two of which we were his guests at the Executive Mansion, and has expressed the wish that we shall meet with him again before the end of this calendar year.

This report would be incomplete without paying a tribute to Commissioner W. A. Frost, one of Kentucky's outstanding citizens who has for many years been interested in various phases of social welfare and who consented, at the earnest solicitation of Governor Johnson, to accept appointment last December as head of the Department of Welfare. Mr. Frost has attended two of our meetings and has given unmistakable assurances that he will do everything in his power to further the best interests of the state hospital program. He has already become familiar with the present facilities and immediate future needs of the Division of Hospitals and mental hygiene and should have a tremendous influence with the next session of the Legislature. He has, furthermore, demonstrated his ability to get a better quality of attendant personnel without antagonizing the politicians, and should be equally influential in assisting Governor Johnson to obtain adequate appropriations for new construction. We extend to both of them our hopeful best wishes for success in their efforts, and wish to assure them that we have the utmost confidence in their ability and sincerity of purpose. A great deal of progress is now being made, but much remains to be done.

Irvin Abell  
Ernest Bradley  
W. E. Gary

C. C. Howard  
 A. C. McCarty  
 A. T. McCormack  
 W. E. Gardner, Chairman.

PRESIDENT GARY: This report is now open for discussion.

W. E. GARDNER: Mr. President, Dr. Lyon is here.

A. M. LYON: Mr. President, Ladies and Gentlemen: It is mighty nice of Dr. Gardner to tell some of the good things. I think I want to spend most of my time telling you of the things that we should do.

The problem of caring for the mentally ill at last is in great measure in the hands of the medical profession. That is why we have made what progress we have made. The progress that has been made is highly appreciated by us fellows who have the responsibility. I have been connected with this work, as some of you probably know, for a period of years and I can say to you that Governor Johnson has the greatest interest in the welfare of the mentally ill of any Governor for the last twenty-five years. His whole heart seems to be in the welfare of the mentally ill, and he is guided by this Advisory Council, which is composed of outstanding members of the medical profession of Kentucky.

We have in our hospitals some 6,600 people now. We have to receive in our three mental hospitals approximately 2,000 people each year, and we are doing everything we can to try to meet the admissions. We have a limited staff, only six doctors for 2500 patients, and that is terrible. We know that one doctor can't take care of 500 patients and do them any good.

We have increased our staffs as far as our present funds will permit. We are trying to treat the mentally ill with a limited sum. Listen to this: We are taking care of these patients, supervising them, medical care, food, clothing, housing, for only 47 cents a day. Imagine that! We must do something more for the mentally ill. We can't get any results if we don't spend more than that.

Up until two years ago there was but one registered nurse in all the hospitals. We had to take care of the patients with attendants picked wherever we could get them. You can imagine the results, taking people out of the ranks of everyday life to administer scientific treatment. We must do something. One person out of every twenty is now consulting, has consulted, or will consult psychiatrists, and

the other nineteen of us don't feel so safe. We can't tell who is going to have to go to a mental institution. At least four times each week I am requested to take care of some boy who has become psychotic since his induction into military service. We are unable to do that because of overcrowded conditions, and something must be done. I am appealing to this group of men, the best group of folks in Kentucky, to help us fellows do something for the mentally ill.

There is an increase of mental disorders, particularly in the group of alcoholics, and there is an increase because of the very difficult problem of living now; it is much more difficult to meet the conditions now than it was formerly, and that brings about, as you know, a psychotic condition in some folks.

As to the treatment of paresis or mental disorders due to syphilis, we are doing a good job. We can look forward, gentlemen, to the time when that phase of our responsibility will not be as great as it is now because of the very vigorous and scientific treatment, the various health departments of Kentucky and the Public Health Service are now giving the initial syphilitic.

As you know, it takes from two and a half to four years after the first infection of syphilis before neurotic or psychotic conditions develop as the result of it.

We have instituted a record system whereby in the course of the next two or three years we will be able to point out some of the weak points, we will know who it is that comes, why they come, how long they stay, what treatment was given them while they were there, and try to get them out of an institution. In treating mental disorders, if you don't do something for the patient in the course of six to eighteen months he becomes invariably a chronic case.

As Dr. Gardner said, we are doing something in the shock therapy field, and there is another field that we are trying to do something in that I want to mention—the deficiency diseases, using dietary measures to bring about better function.

Last, gentlemen, let's do something for the mentally ill. At least let's put them in structures where they will not be subject to being burned up. May I state that but for the grace of God Kentucky's mental institutions would have been burned to the ground. They are all fire traps. We must prepare to take care of a greater



number after this great catastrophe that now covers the world is over.

Let me give you one story of human interest and then I will go. Right now, in one of our institutions, we have an aged mother who had but two sons. They died on Flanders' Fields, and we have that mother in a fire trap suffering from a mental disorder. There are thousands of cases like that. Something must be done, gentlemen. The care of the mentally ill is the problem of the doctor, and it looks like we are on the right road.

I want suggestions, I want criticisms that are constructive. I am trying to do the best I can with what we have to do with. Let me urge you, on every occasion, to stimulate an interest in the doing of a better job for the mentally ill.

PRESIDENT GARY: If there is no objection this report will be filed.

T. A. FRAZER, Crittenden: Mr. President, I think we should go on record with a resolution of some kind memorializing the Legislature to make an appropriation this coming Legislature, sufficient to build an institution to take care of the mentally ill. As I told Dr. Lyon in conversation this morning, I guess it will take \$6,000,000.

He said, "Well, you guessed in a million of it anyhow."

Kentucky is collecting millions and millions of dollars; we are spending millions and millions of dollars, and we are not paying any attention to these unfortunate folks. They come from every part of the state; there are all classes of them. The State of Kentucky is spending enough money and the taxpayers are paying enough money into the treasury that this coming Legislature ought to appropriate at least four or five million dollars for these institutions, and I am going to make a motion that this Society endorse the spending of, I will say, \$5,000,000 for institutions for the treatment of the mentally ill in the next two years.

The motion was seconded by Ernest B. Bradley, Lexington.

SECRETARY McCORMACK: Mr. President, there is no question about the importance of this problem. Without disapproving a single sentence that has been said or a single word that has been said, I want to call your attention to an analogous situation that had developed when the State Board of Health was organized. It was organized purely for the purpose of controlling the great zootic epidemics that swept this

country. Nobody ever thought, back in 1878 when Dr. Blackburn's statesmanship developed the State Board of Health, that the time would ever come when typhoid fever would be controlled or the menace of diphtheria eliminated, practically. It was not considered conceivable that anything could be done about tuberculosis. It was considered a visitation that couldn't be avoided. Death from the diseases of infancy was expected so confidently that we knew we were going to have a holocaust of the newborn and of the under-privileged infants every year.

Through your zeal, that period passed, but still today we find ourselves as physicians still thinking in terms of a half century ago. We still treat the end results of the neglect of society instead of treating the cases in their incipency and securing results when they can be actually productive in our social relations.

What are we proposing to do in our hospitals? The first undertaking that the Governor has very wisely assumed—and it was criminal of his predecessors that they didn't do it—is to make these institutions modern, to make available to their inmates the best treatment that could be given the mentally ill for those that are still susceptible to treatment, or susceptible when they arrive there. But are we going to continue indefinitely to build enormous reservoirs for the preservation of the lives of those who can never be returned to society, who will never be economic assets? Are we going to preserve them indefinitely at the expense of all those who can be saved?

As Dr. Lyon has so well said, the profession is undertaking with modern methods to treat syphilis. We are undertaking with modern methods to treat many of the other underlying conditions that eventuate in commitment in mental institutions for life. I just want to sound a note of caution, that we can't continue to propagate psychotic and psychiatric and insane conditions indefinitely and continue to expect the state, our state, to support indefinitely such institutions at the expense of that large group of our people who have conditions that are relievable and who can be restored to usefulness and to society.

I venture the prediction on the knowledge that I have gotten largely from Dr. Lyon, because I don't think any member of our profession is more progressive or is looking further forward in the develop-

ment of this program than he is, that large numbers of these people who are sent to the institutions ought never to have been sent there; they ought to be readjusted in their social relationships at home; they ought to be cared for so they are not sent to institutions. It can be done at home, with good psychiatric nurses, trained as he proposes to train them. One of the most important steps he is proposing, and one of the most constructive things he is proposing, is the establishment of a nurses' training school in psychiatric nursing in the institutions, which would be a by-product of the institutions themselves and would be contributing to increased scientific and humane care of the inmates, but in addition to that, due to the securing of a larger number of trained psychiatric nurses who could be connected with our Health Departments and at the disposal of our physicians when they found cases of maladjustment, they would be enabled to help solve the problem before it became a psychiatric problem. We have been making some attempts in this line. In Madison County, in the Carroll-Trimble-Allen County Health District, and Mason County, we have trained psychiatric nurses in the Department, working with Dr. Lyon and the staffs of the hospitals, both in cases that had not yet been sent to the institution and in the paroled cases who came back, who so frequently are repeaters, coming back to the institution just as they do in our criminal institutions.

I think I know the fiscal situation of the state probably as well as anyone else knows it, and it is inconceivable, I believe, that we would make a mistake in making a recommendation to the General Assembly entirely beyond the capacity of the state for the construction of these buildings. We have just constructed a new building. We spent two million dollars on it. That exhausted the resources of the state to a very great degree. The Governor is a frugal Governor, a very thoughtful one, a really very great statesman, and he considers this problem his A-1 problem. He is striving his very level best to meet us and meet our recommendations in its solution, and in the solution of that problem he is attempting first to so reconstruct the existing institutions that they will not only be fireproof, but they will be rat-proof and vermin-proof, they will have the modern facilities to enable human beings to live in comfort, and until you be-

gin to think of it in terms of dollars and cents you don't realize what that means. You must remember that the Eastern State Hospital at Lexington was built in 1824, and the only thing that has been done to it since has been done by the elements. No state appropriation has helped in any other way than to prop up some of its decaying floors. Radiators have actually fallen through the floors in the last few weeks. There was no night last winter that the members of your committee or of Dr. Lyon's staff went to sleep without the anxiety on their minds that before morning the heating plants would be out. The electric wiring in these institutions has been done, 98 per cent of it, by the insane inmates, and has been done just exactly like insane inmates would have done it. You wouldn't believe it unless you walked through these institutions, as we have done, and saw the sparks from uncovered connections that were constantly threatening fire. Why fire hasn't occurred nobody can explain. These things must be done first, and they will cost a great deal of money.

In one building that I think houses nearly 780 patients at Lexington, the walls are as sound and as good as any walls that could be built today, but the floor is about to fall in; the plastering is dropping off; the heating plant has been restored as the central plant, but the distribution plant is still faulty. Those things are being corrected, and it will cost somewhere in the neighborhood of \$450,000 to make that one ward safe for the people who are now in it. To my mind, it would be an idle thing to build a new institution until the buildings that are now housing 5,000 people are so rehabilitated that they can be utilized safely by the present inmates of the institutions.

Your committee has recommended, I think wisely, a receiving institution at the Central Hospital, and if the money is available, another at the Eastern Hospital. I am quite sure that that is the only thing that can be possibly done in the next two years. That will cost two and a half million dollars, and it will be all the money that will be available. I believe it would be unwise for us to recommend to the Legislature and embarrass the Governor, who is striving his very levellest best to do what we want, an impossible thing when he is trying to do more than is really economic.

It is true that the state is spending a



great deal of money. It is true that its income is larger, but the demands on it are increasing from every department of the state, because these aren't the only buildings that need attention; the Capitol itself is almost in a state of decay. The Capitol of the United States required the expenditure of several million dollars to keep its dome from caving in. We American people are not given to the maintenance of our institutions when built. We are given to the idea of new buildings, but the restoration of those we have within our resources is our first responsibility, it seems to me, and I believe if you will accept the recommendations of the committee rather than extend those recommendations to proportions that are entirely beyond the resources of the state, you will have accomplished very much more in actual construction, because if we confuse the Legislature with the demands for one particular activity, every other agency is going to do the same thing; the State University is going to ask for two million dollars, they are going to put up a pretty good case and prove they have to have it; the Institution for the Blind, the same. The Governor went out and made a call at the Institution for the Blind; he went through it unheralded and saw it in a state of decadence—the first Governor who has been there in twenty-five years. The same thing applies to the Institution for the Deaf; the same thing applies to the whole system of our state buildings, and they all require certain renovations and certain construction. To my mind, it would be unwise to confuse the General Assembly by asking for a great deal more than we can get, but by confining ourselves to the support of the splendid, statesmanlike, constructive program of the Governor, we are going to secure that if we back him up. If we say to the General Assembly that we want far more than they can possibly give, they will say, "They are unreasonable, anyhow, and there is no chance to satisfy them. We won't be able to do that so we won't do anything." I believe if we adopt the report of the committee—and I believe if Dr. Frazer will consider it he will feel we will be doing the thing that can be done—we will have the expenditure of approximately three million dollars in the next few years on these institutions, and that is all the money that is going to be available. If we ask for five million, I believe it would be unwise at this particular time as a matter of state strategy in securing

support for a program so vast as this. I want to leave with all of you the thought in all these things that it is not the sentimental care of the terminal condition, it is not the repair of the poor in the poor-house, that should be our objective; it is the care of those who are going to be so poor that they will be in the poor-house, by readjustment of social obligations so as to give them the opportunity for earning their way and for earning their old age pension instead of being on a dole, that seems to me to be the great objective of statesmanship and the thing toward which we are building in our Commonwealth.

It is very important for us to remember, entirely regardless of what our State books seemed to show from time to time, that we have been in the red every single year since 1909. We have a very delicate revenue structure. During a period like this, of extension, of success, we have largely increased revenues. As soon as a depression comes we have a shrinking of the revenue that is perfectly perceptible, and it can be seen by everybody and we know it is coming; we know it is coming before long, and the Governor knows it is coming; he is trying his best to make hay while the sun still shines, and to do those constructive things for the state within our ability. We are fifth from the poorest state in the Union in per capita income of our people. Consequently, we will always be a poor state. It is interesting that while we are fifth from the poorest, we are the eleventh of the states that pay money into the Federal Government for its revenue, but that comes from whiskey and tobacco, and we don't pay the money for it, we are just the collectors for it. Kentucky, per capita, drinks less whiskey and chews and smokes less tobacco than almost any of the other states, but the other states buy our products and pay the enormous taxes levied by the Federal Government. That is a matter we can't avoid, but we must always remember that we are a poor state. It is difficult for many of you to realize that, because in Louisville the per capita income is equal to that of the best state in the Union, and Lexington, higher, but in many of our counties, it is less than \$300 per family per year. We realize that we have to be a frugal people.

T. A. FRAZER, Crittenden: Mr. President, that was a great speech Arthur made. I have heard him make so many, I always enjoy them whether I agree with him or

not. But the State of Kentucky in the past six years has paid a debt of \$25,000,000. They are out of debt today. What are they going to do with this excess that they are collecting? Is that all going to the politicians and office-holders? Remember, Arthur, that we owed \$25,000,000 when Happy Chandler was elected Governor. We practically paid that in six years, and we have got our other obligations all paid. I have been through those buildings, especially Lakeland and Lexington, and I have looked at them carefully, and I don't believe that those buildings could be reconstructed and fire-proofed and made safe as cheaply as they could build a building that would house the same number of patients.

SECRETARY McCORMACK: Unfortunately you disagree with the architects and engineers who have made the estimates.

T. A. FRAZER: It doesn't make any difference about the architects and engineers. You take an old building a hundred years old, and bricks are ready to fall out of the wall everywhere; practically all the wood is eaten up by termites.

SECRETARY McCORMACK: They are going to take all that out.

T. A. FRAZER: To make a modern building that is safe to house the mentally ill or anyone else in this day and time it has to be built of concrete and steel; you can't build it of wood any more, and make it safe; you can't make it fire-proof with wood. You have to construct buildings of concrete and steel, and I feel that this state of Kentucky is amply able and will be amply able in the next two years to spend \$5,000,000 for the benefit of the mentally ill. Of course, many go there that shouldn't go there; I have known many to go there that shouldn't go there, but they go there just the same and they are going to continue to go there, and we are going to have more psychosis following this disturbed condition of the world, this Second World War, we are going to have more mothers, more sisters, more widows and more soldier boys who are going to need attention in institutions. Of course, a good many things can be done at home, but you know and I know that it is precious little we doctors through the country do for the mentally ill. We haven't access to psychiatrists for all these patients. If they were able to go to Dr. Gardner and these other psychiatrists and be treated early and could pay for it, and be taken care of, it would save thou-

sands of men and women from going to institutions or hospitals for the insane, but I still believe that the State of Kentucky is amply able to appropriate \$5,000,000 over the period of the next two years to build hospitals for the mentally ill.

SECRETARY McCORMACK: Mr. President, the first order of business is a motion to approve the report of the committee.

W. B. ATKINSON, Campbellsville: I move you that the committee report be adopted. The motion was duly seconded.

PRESIDENT GARY: All in favor of the motion to approve the report of the committee say "aye"; contrary "no." The "ayes" have it and the report is approved.

In regard to Dr. Frazer's motion, is there any further discussion on that? Are you ready for the question? All in favor of the motion say "aye"; opposed "no." The "noes" have it and the motion is lost.

The next order of business is the report of the Committee on Crippled Children, Dr. Barnett Owen, Chairman.

SECRETARY McCORMACK: I have the report, Mr. President:

#### REPORT OF COMMITTEE ON CRIPPLED CHILDREN

During the fiscal year ending June 30, 1941, the Kentucky Crippled Children Commission, which is the official state agency for the treatment of crippled children whose parents are financially unable to pay for their care, provided hospitalization and orthopedic appliances for 1,487 individual cases, the largest number ever treated by the Commission during one year.

Services to individual patients totaled 2,547, many cases being handled more than once, with some patients receiving as many as nineteen periods of care during the year. Monthly services rendered by the Commission averaged 196. Services include hospital treatment, braces, x-rays, corrective shoes and special treatments.

Hospital admissions totaled 1,562; services without hospitalization totaled 985. Of the individual cases handled during the year, 785 had been previously treated by the Commission and the remaining 702 were new patients.

During the year, 25 itinerant clinics were held at which examinations totaled 2,109. Weekly clinics were also held in Lexington, and monthly clinics in Ashland, two of the three hospital centers in the state. An average of 68 examinations is made monthly in these two clinic centers. Through the districting of the state for



field service and the holding of clinics, free examination and diagnosis are made available to crippled children in every one of the 120 counties of the state. In addition to clinic examinations, the Commission reported that 2,003 visits were made by patients to the main office in Louisville.

The summer of 1941 witnessed an outbreak of infantile paralysis in Kentucky, the largest number of cases being reported in Anderson and Jefferson Counties. Through a splendid system of cooperation worked out between the State Health Department, the County Health Departments, and the Crippled Children Commission, the cases were reported promptly, were properly quarantined, and were given home instruction and treatment. The Commission's orthopedic nurses went immediately into the field to assist the health officers and county nurses and to apply splints which were furnished by the National Foundation for Infantile Paralysis. The cases are being carefully followed up and are being brought into the hospitals in Louisville and Lexington for any treatment that is deemed necessary after the acute stage of the disease has subsided.

The Commission is always grateful to the State and County Health Departments and to the members of the medical profession throughout Kentucky, who over a long period of years have cooperated generously and wholeheartedly to help the Commission carry out its work successfully. Without the assistance of the Kentucky State Medical Association, the program for crippled children in our state would not be considered one of the outstanding ones in the country as it is so considered today.

Respectfully submitted,  
Reference Committee on  
Crippled Children:

Charles C. Garr, Lexington  
Franklin Jelsma, Louisville  
Leslie H. Winans, Ashland  
C. M. McKinley, Lexington  
W. B. Owen, Louisville

Chairman

Mr. President, this is the first time I have seen this report, and if you will permit me, I would like to call your attention to an analogy. Up until the last three years, every case of crippling was treated as a cripple. They were brought in and braces were put on them and operations were performed for the purpose of making them the least crippled possible. The procedure is that where there is an epidemic, as there was

in Anderson County, an orthopedic nurse is immediately placed in that county, the splints are provided immediately, and the vast majority of those children that heretofore became public charges are never even crippled. They are relieved before they ever become crippled. The same thing can be done under the program that Dr. Lyon is developing in mental health in a vast number of cases. It is just a difference between accepting as inevitable a condition that we know now, with our increased scientific knowledge, is avoidable, and doing something about it. This wasn't true of crippled children even five years ago, to any extent, in this country, and if it had been the splints were not available.

W. B. ATKINSON, Campbellsville: I move the adoption of the report.

The motion was duly seconded and carried.

PRESIDENT GARY: The next order of business is the report of the Committee on Control of Cancer, Dr. Francis M. Massie, Lexington.

#### REPORT OF THE COMMITTEE ON CONTROL OF CANCER

The committee is pleased to report this year that the money raised in Kentucky by the Woman's Field Army of the American Society for the Control of Cancer exceeds by 40 per cent the total amount raised by this organization in 1940. To date, the Woman's Field Army reports the collection of \$13,991.56 with the probability that this amount will be greater by January 1, 1942. We take this opportunity to thank their president, Mrs. T. C. Carroll, for the splendid work these women have done, and through her to thank every woman who has worked in this campaign. We hereby call the attention of this House to the fact that it has been almost entirely through the work of the Woman's Field Army that funds have been raised for this work.

It is important for this House to know that of the nearly \$14,000 collected, only \$6,500 has been used for the actual care of indigent cancer patients. Thirty per cent has been sent to the National Headquarters. It is vitally important that the Woman's Field Army maintain this connection with the National Headquarters, and we consider this 30 per cent well spent. The remainder has been spent for necessary educational work.

The committee realizes that this educational work is also vitally important and calls your attention to the fact that as more money is raised the proportion allotted-

ted to actual care of the indigent rises. For example, if only \$6,500 is used for patients out of \$14,000, possibly \$12,000 can be spent on patients directly when the total is \$20,000.

In addition to the four free cancer beds reported last year, a second bed is now available in Lexington.

This committee thinks that it is important to establish free beds in other parts of the state, notably Ashland, Covington and Paducah. It is much easier for the Woman's Field Army to raise funds in a community if there is a free bed in this community which local residents know is the immediate object and beneficiary of the campaign.

The American Society for the Control of Cancer has established minimum requirements before they will recognize and endorse for treatment any free cancer bed. These requirements chiefly concern the competency and training of the personnel in charge and the amount and efficiency of the radiation equipment. While this committee entirely agrees with the need for these requirements, we feel that much can be done by establishing cancer beds which do not fully meet these requirements. We feel that such beds will help to solve the problem:

- (1) By giving many people surgical and medical cancer care who do not need radiation.

- (2) By finding more people and sending them to the centers where adequate radiation is available.

- (3) By stimulating the local profession to hold diagnostic and treatment clinics of their own without the necessity for visiting groups of specialists who often arouse local antagonism.

- (4) By acting as nuclei for the later formation of groups which will meet the requirements of the American Society for the Control of Cancer.

Your committee feels that although the public is becoming cancer conscious, we as doctors are not enough so. The weakest link in the chain forged against cancer may soon be the doctor himself. No regimentation or socializing process that we can foresee will ever remedy this defect. Only the individual conscience and ambition of the doctor himself can drive him to keep abreast of what is going on. Only by attending local, state and national meetings, only by going to clinics where many patients with early cancer are seen, can he learn enough to protect the public. The

public is learning that when cancer causes weakness, loss of weight, anemia, pain and necrotic odor, the condition is too far advanced for help. Have we learned this too?

It is the hope of this committee that cancer control in this state may soon be aided by an appropriation from the Legislature. Where this has been done in other states the amount given has been matched by an equal amount from the Federal Government.

Respectfully submitted,

L. Wallace Frank

S. C. Smith

Francis M. Massie, Chairman.

C. W. DOWDEN, Louisville: I move the report be accepted.

The motion was duly seconded and carried.

Next is the report of the Obstetrical Advisory Committee, Leon Higdon, Paducah, Chairman.

#### REPORT OF THE OBSTETRICAL ADVISORY COMMITTEE

LEON HIGDON, Paducah: This Committee, in its report last year, pointed out that: Maternity nursing aid at the time of delivery had been established in ten (10) counties. This number of counties is still functioning. In Warren, McCracken, Johnson and Boyd Counties this nursing has been placed on a rotating, fully guaranteed basis. In the remaining six (6) counties there are either one or two nurses doing this type of service.

In all of the counties this service has been of great value to both the physician and the mother. The chief difficulty that has been encountered in this service is that mothers do not register with their family physician as early in pregnancy as is desired.

For the year 1940, 2,642 mothers received nursing service at the time of delivery. All or practically all of these mothers received prenatal care as directed by her attending physician. All mothers attended at delivery received one or more postnatal visits by the obstetrical nurses.

POST GRADUATE TRAINING: During the year 1940-1941 four (4) counties were visited by the State Pediatric Consultant and obstetrical conferences and clinics were held and talks were given to organized civic bodies or to general groups of people. It is felt that these combined obstetric-pediatric meetings were very worth while both to physicians and to the general public.

In the report made last year by this



Committee it was stated that incubators had been placed in the counties. Much benefit has been derived from the use of the incubators in the prevention of death in prematurely born infants.

**MIDWIVES:** The Bureau of Maternal and Child Health of the State Department of Health has conducted studies of the extent of the problem of deliveries by local midwives. It was found that the largest part of this problem exists in the eastern and southeastern part of the State. In 35 counties, 25% or more of the deliveries were done by local midwives. In this same area for the most part it is inadequately supplied by physicians, hospitals and auxiliary personnel and equipment.

Adequate medical care for mothers living in this area is a serious one; one that should receive thoughtful consideration of our profession.

Respectfully submitted,

Leon Higdon, M. D.,

Chairman, Obstetrical Committee

Next is the report of the Pediatric Advisory Committee, Dr. James H. Pritchett, Chairman.

**JAMES H. PRITCHETT, Louisville:** Mr. President and Members of the House of Delegates: Your committee begs leave to report as follows:

The policy of holding clinics and conferences on child health has been continued this year in different sections of the state. The pediatricians of Louisville, Lexington, and Paducah again cooperated wholeheartedly in all the programs which have been held since the last meeting of the State Medical Association. Such clinics and conferences were held at McKee, Augusta, Shelbyville, Burkesville, Williamsburg, Cynthiana. Pre-school clinics were held in Estill, McCreary, Hardin, Casey and Adair Counties. Combined obstetrical and pediatric clinics and conferences were held at Benton, Henderson, Greenville and Grayson. In addition to the great number of children examined, a number of difficult obstetrical cases were brought in to the obstetrical consultant by the family practitioners. All of these meetings were well attended and seemed to be of great interest to the doctors. In most of the cities educational health talks were made to lay groups, such as the Parent-Teacher Associations, women's clubs, and luncheon clubs. During the past year, we have, in conjunction with the Crippled Children Commission, made pediatric examinations of all of the children brought into the

Crippled Children's Clinics, thereby screening out many cases of juvenile tuberculosis and undernourishment, and returning these children to their family doctors, or, if the family is unable to have a private physician, to the respective health officers for further study and treatment. Crippled Children's Clinics were held at Owensboro, Maysville, Pikeville, Ashland, Frankfort, Hazard, Elizabethtown, Beattyville, and Corbin.

The consultant in pediatrics to the Department of Health, Dr. Philip F. Barbour, was appointed to the State Committee on Nutrition for Defense and has attended and made addresses before a number of meetings on nutrition, held at Hardinsburg, Hawesville, Elizabethtown, Owenton, Lexington, Murray, White Mills and Mammoth Cave. Special papers on nutrition were also read before the Big Sandy District Medical Society and the Woodford County Medical Society.

Some forty-odd meetings have been arranged for and held during the past year. All such meetings have had the generous cooperation of the medical profession. The underlying purpose is that of education of the lay public in pediatrics and obstetrics, and as refresher courses in pediatrics for the general practitioner.

Respectfully submitted,

Thomas J. Marshall, Paducah

J. G. Vandermark, Covington

Thomas M. Marks, Lexington

W. W. Nicholson, Louisville

James H. Pritchett, Louisville,  
Chairman.

Mr. President, I move the adoption of the report.

The motion was duly seconded.

**SECRETARY McCORMACK:** Mr. President, let me make a statement here that is not exactly appropriate to the report, but a couple of delegates this afternoon called my attention to some abuse that has occurred in some of the counties in regard to the holding of clinics where patients who are amply able to be attended by their private physicians were cared for at clinics. It is the well established policy of this Association and of the State Department of Health that the Health Departments give no treatments except for preventable diseases, such as syphilis and other emergency diseases. Child health clinics and pre-natal clinics may be held for educational purposes, but the treatment of disease found in such clinics should be referred to their family physi-

cians whether they are able to pay for it or not, because the health officer is not supposed to treat anybody.

I want to call your attention to that principle, because wherever it is found it is because you are not having meetings of your county boards of health and instructing and protecting your health officer from the pressure that is being placed on him, for instance, to engage in indigent practice, which is a violation of law and which is not his function at all; it is your function to treat poor people as well as rich ones, and it is not the health officer's function to treat anybody; his job is to take care of sanitation and to prevent disease. Whenever he treats sick people except where it is communicable, such as syphilis or Shiga's dysentery epidemics, or something of that sort, where it is necessary to prevent the spread of infectious diseases, he is violating the principles you have laid down and we have laid down, and we want to ask your cooperation in preventing abuse in that respect, because it is not the intention on the part of the health officers themselves; they are frequently pressed into doing it because they do not have the protection that you must throw around them by having frequent meetings of your county boards of health.

PRESIDENT GARY: Are you ready for the question? All in favor of approving of this report say "aye"; contrary "no." The "ayes" have it and it is so ordered.

Report of the Committee on Periodic Health Examination, Dr. C. W. Dowden.

#### REPORT OF COMMITTEE ON PERIODIC HEALTH EXAMINATION

C. W. DOWDEN, Louisville: Notwithstanding its very great importance, relatively few physicians insist upon periodic health examinations, nor has their value been sufficiently stressed to the laity. There is little or no doubt that any capable physician will be able, by careful clinical history and physical examination, to detect the early evidence of many diseases, particularly malignancy, hypertensive cardiac disease, kidney disease, tuberculosis, and others, probably a year or even more before they would be subjectively evident to the patient.

These periodic health examinations, however, should go farther than this. They should point out and correct dietary faults, and particularly vitamin deficiencies. They should also investigate, and correct, if possible, abnormal working conditions, particularly where there is insufficient rest,

fresh air, and diversion. Inquiry into the water and milk supply, as well as refrigerating facilities, may uncover the cause of chronic illness. Furthermore, such examinations should seek out and correct conditions due to endocrine imbalance, particularly during the climacteric of both sexes. Occasionally, but not often, such an investigation will lead to the discovery of evidence that may require consultation with x-ray and laboratory investigations.

As to the time such examinations should be made, that depends largely upon the age of the individuals. It has become a custom with many physicians to have their patients examined on their birthdays. In the case of infants and children, the problem is not so acute since they are under the care of the pediatrician and the school physician. In the young adult group, such examinations should be performed at least every two years, and, better still, yearly. And in the middle and old age group they should be done more frequently.

Of greatly increasing importance is the periodic health examination as a national defense measure. In the symposium on Selective Service to be presented before the Society on Thursday morning at nine o'clock, the reasons for more than 10,000 rejections of registrants by local board examiners will be discussed, as well as other subjects of extreme interest and importance. A goodly number of these 10,000 rejections certainly might have been prevented by the periodic health examination.

To indicate the importance of such examinations in the young adult, a statement by W. L. Shirer in his recent book, *Berlin Diary*, is most instructive. Concerning a batch of British prisoners, he says, "They were a sad sight, some obviously shell-shocked, some wounded or dead tired. They were hollow-chested and skinny and round-shouldered. About a third of them had bad eyes and wore glasses." He further adds, "Typical, I concluded, of the youth that England so criminally neglected in the twenty-two post-war years when Germany, despite its defeat and the inflation and six million unemployed, was raising her youth in the open air and sun; the German bronzed, cleancut physically, healthy looking as a lion, chest developed and all. It was just a part of the unequal fight."

Certainly this should make us realize the tragedy of neglecting to conserve the health of our young manhood particularly, as well as of others. The number



of working hours and the dollars and cents that may be saved are incalculable, to say nothing of the disease and debility, as well as the loss of life that may be prevented.

Your committee would like to stress the very great and even grave importance of the periodic health examination, and to urge that it be brought more generally to the attention of the medical profession in particular and the laity in general.

Respectfully submitted,

George H. Gregory

R. Emerson Smith

Chauncey W. Dowden,

Chairman.

SECRETARY McCORMACK: I move the adoption of the report.

The motion was seconded by E. B. Bradley, and carried.

PRESIDENT GARY: The next is the report of the Committee on Exhibit of Doctors' Arts, Dr. Jesshill Love, Louisville, Chairman.

SECRETARY McCORMACK: Dr. Love asked me to say that the exhibit speaks for itself. He will be very happy to have you look at it and to contribute to future exhibits by bringing your hobbies along, including your Auxiliary.

PRESIDENT GARY: Is there any discussion of this report? If not, it will stand approved as presented.

Report of the Committee on Public Relations, Dr. Irvin Abell, Louisville, Chairman.

#### REPORT OF COMMITTEE ON PUBLIC RELATIONS

IRVIN ABELL, Louisville: Mr. President and Members of the House of Delegates: In a confused world, it is both stimulating and challenging to appear with a group of selected representatives of the greatest profession that serves mankind, to discuss with them their public relations. Just as the credos of many faiths are frequently repeated in our temples, so in our annual gathering, and in the meetings of our county societies, we should repeat the reading of Article II of the Constitution of the Kentucky Medical Association setting forth the purposes of organized medicine:

"The purpose of the Association shall be to federate and bring into compact organization the entire medical profession of the State of Kentucky and to unite with similar associations in other states to form the American Medical Association, with a view to the extension of medical knowledge, and to the advancement of medical

science, to the elevation of the standards of medical education and to the enactment and enforcement of just medical laws; to the promotion of friendly intercourse among physicians, and to the guarding and fostering of their material interest, and to enlightenment of public opinion in regard to the great problem of state medicine, so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life."

It is important for us to keep alive in the public consciousness that in peace or war, prosperity or depression, inflation or deflation, the physician continues on his daily rounds using all the knowledge that science provides and faith gives him in the prevention, amelioration and cure of diseases, and the preservation of health with its resulting efficiency and happiness. With these high objectives it is necessary from time to time to develop amongst ourselves definite plans for the improvement of our service to the people, because civilization has become so complicated that it is essential that organized effort be made with the Government to accomplish purposes which, throughout the ages, were furnished for a few by individual effort, but which are now being developed for many through organized and carefully guided work.

With these thoughts animating us, and with these purposes before us, we should carefully consider the recommendations that we shall make to the Governor and the General Assembly of Kentucky for the approaching session of the Legislature.

First on our program will be the presentation of the Food, Drug and Cosmetics Act, which will conform to the Federal legislation and which will prevent Kentucky from continuing to be a dumping ground for products which are deleterious to the health and welfare of our people. At the last session of the Legislature, this matter was postponed because we had presented to us legislation which was hastily prepared and which contained several provisions to which objections were properly raised by both physicians and pharmacists.

Numerous conferences have been held with the view to perfecting this legislation, and we herewith present to you and ask your approval of the carefully prepared bill which will keep Kentucky in step with advanced legislation concerning these commodities, which has already been

adopted by most of the other states. The proposed bill is as follows, and we recommend its approval for presentation to the Legislative Council and the General Assembly:

Section 1. This Act may be cited as the Kentucky Food, Drug and Cosmetic Act.

Section 2. For the purpose of this Act.

(a) The term "Board" means the State Board of Health of Kentucky.

(b) The term "person" includes, individual, partnership, corporation, and association.

(c) The term "food" means (1) articles used for food or drink for man; (2) chewing gum, and (3) articles used for components of any such article.

(d) The term "drug" means (1) articles recognized in the United States Pharmacopoeia, official Homoeopathic Pharmacopoeia of the United States or official National Formulary, or any supplement to any of them; and (2) articles intended for use in the diagnosis, cure, mitigation, treatment or prevention of disease in man or other animals; and (3) articles (other than food) intended to affect the structure or any function of the body of man or other animals; and (4) articles intended for use as a component of any article specified in clause (1), (2), or (3), but does not include devices or their components, parts, or accessories, but shall include insecticides, fungicides and rodenticides.

(e) The term "device," except when used in paragraph (k) of this section and in section 3 (j), 11 (f) and 15 (c), and 18 (c), means instruments, apparatus and contrivances, including their components, parts and accessories, intended (1) for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals; or (2) to affect the structure or any function of the body of man or other animals. Provided that appliances intended or having a special utility for the prevention of venereal diseases, the licensing and sale of which are provided for in Sections 2536 c-1 to 2635 c-13 (Carroll's Ky. Statutes) inclusive, and devices used solely by a person holding a valid certificate to practice any branch of the healing art, are excepted from this definition.

(f) The term "cosmetic" means (1) articles intended to be rubbed, poured, sprinkled, or sprayed on, introduced into, or otherwise applied to the human body or any part thereof for cleansing, beautifying, promoting attractiveness, or altering the appearance, and (2) articles intended for use as a component of any such articles, except that such term shall not include soap.

(g) The term "official compendium" means the official United States Pharmacopoeia, official Homoeopathic Pharmacopoeia of the United States, official National Formulary, or any sup-

plement to any of them.

(h) The term "label" means a display of written, printed or graphic matter upon the immediate container of any article; and a requirement made by or under authority of this Act that any word, statement, or other information appear on the label shall not be considered to be complied with unless such word, statement, or other information also appears on the outside container or wrapper, if any there be of the retail packages of such article, or is easily legible through the outside container or wrapper.

(i) The term "immediate container" does not include package liners.

(j) The term "labeling" means all labels and other written, printed or graphic matter (1) upon an article or any of its containers or wrappers, or (2) accompanying such article.

(k) If an article is alleged to be misbranded because the labeling is misleading, or if an advertisement is alleged to be false because it is misleading, then in determining whether the labeling or advertisement is misleading, there shall be taken into account (among other things) not only representations made or suggested by statement, word, design, device, sound, or in any combination thereof, but also the extent to which the labeling or advertisement fails to reveal facts material in the light of such representations or material with respect to consequences which may result from the use of the article to which the labeling or advertisement relates under the conditions of use prescribed in the labeling or advertisement thereof or under such conditions of use as are customary or usual.

(l) The term "advertisement" means all representations disseminated in any manner or by any means, other than by labeling, for the purpose of inducing, or which are likely to induce, directly or indirectly, the purchase of food, drugs, devices or cosmetics.

(m) The representation of a drug, in its labeling or advertisement, as an antiseptic shall be considered to be a representation that it is a germicide, except in the case of a drug purporting to be, or represented as, an antiseptic for inhibitory use as a wet dressing, ointment, dusting powder, or such other use as involves prolonged contact with the body.

(n) The term "new drug" means (1) any drug the composition of which is such that such drug is not generally recognized, among experts qualified by scientific training and experience to evaluate the safety of drugs, as safe for use under the conditions prescribed, recommended, or suggested in the labeling thereof; or (2) any drug the composition of which is such that such drug, as a result of investigations to determine



its safety for use under such conditions, has become so recognized, but which has not, otherwise than in such investigations, been used to a material extent or for a material time under such conditions.

(o) The term "contaminated with filth" applies to any food, drug, device or cosmetic not securely protected from dust, dirt, and as far as may be necessary by all reasonable means, from all foreign or injurious contamination.

(p) The provisions of this Act regarding the selling of food, drugs, devices, or cosmetics shall be considered to include the manufacture, production, processing, packing, exposure, offer, possession, and holding of any such article for sale, and the sale, dispensing, and giving of any such article; and the supplying or applying of any such articles in the conduct of any food, drug or cosmetic establishment.

(q) The term "Federal Act" means the Federal Food, Drug and Cosmetic Act (Title 21 U. S. C. 301 et seq.; 52 Stat. 1040 et seq.)

Section 3. The following acts and the causing thereof within the State of Kentucky are hereby prohibited:

(a) The manufacture, sale, delivery or dispensing, holding or offering for sale of any food, drug, device, or cosmetic that is adulterated or misbranded.

(b) The adulteration or misbranding of any food, drug, device or cosmetic.

(c) The receipt in commerce of any food, drug, device, or cosmetic that is adulterated or misbranded, and the delivery or proffered delivery thereof for pay or otherwise.

(d) The sale, delivery for sale, holding for sale, dispensing or offering for sale of any article in violation of sections 12, 15 (k), 16 or 23.

(e) The dissemination of any false advertisement.

(f) The refusal to permit entry or inspection, or to permit the taking of a sample, as authorized by section 21.

(g) The giving of a guaranty or undertaking which guaranty or undertaking is false, except by a person who relied on a guaranty or undertaking to the same effect, signed by, and containing the name and address of the person residing in the United States from whom he received in good faith the food, drug, device or cosmetic.

(h) The removal or disposal of a detained or embargoed article in violation of Section 6.

(i) The alteration, mutilation, destruction, obliteration or removal of the whole or any part of the labeling of, or the doing of any other act with respect to a food, drug, device, or cosmetic, if such act is done while such article

is held for sale and results in such article being misbranded.

(j) Forging, counterfeiting, simulating, or falsely representing or without proper authority using any mark, stamp, tag, label, or other identification device authorized or required by regulations promulgated under the provisions of this Act.

(k) The using, on the labeling of any drug or in any advertisement relating to such drug, or any representation or suggestion that an application with respect to such drug is effective under Section 16, or that such drug complied with the provisions of such section.

(l) The using by any person to his own advantage or revealing other than to the Board or officers or employees of the Board, or to representatives of the Federal Government, or to the court when relevant in any judicial proceeding under this Act any information acquired under authority of this Act concerning any method or process which as a trade secret is entitled to protection.

(m) The dissemination or distribution of advertising in the form of samples of drugs except to the medical, dental, veterinary or pharmaceutical professions, and the resale of such samples of drugs.

Section 4. In addition to the remedies herein-after provided the Board is hereby authorized to apply to any circuit court for, and such court shall have jurisdiction upon hearing and for cause shown, to grant a temporary or permanent injunction restraining any person from violating any provision of Section 3.

Section 5. (a) Any person who violates any of the provisions of Section 3 shall be guilty of a misdemeanor and shall on conviction thereof be subject to imprisonment for not more than thirty (30) days, or a fine of not less than Ten Dollars (\$10.00) nor more than One Hundred Dollars (\$100.00), or both such imprisonment and fine; but if the violation is committed after a conviction of such person under this Section has become final such person shall be subject to imprisonment for not more than ninety (90) days, or a fine of not less than Fifty Dollars (\$50.00) nor more than Two Hundred Dollars (\$200.00), or both such imprisonment and fine.

(b) No person shall be subject to the penalties of Sec. 5 (a) (1) for having received any article and delivered it or proffered delivery of it, if such delivery or proffer was made in good faith, unless he refuses to furnish on request of a representative duly designated by the Board the name and address of the person from whom he purchased or received such article and copies of all documents, if any there be, pertaining to the delivery of this article to him, or

(2) for having violated Sec. 3 (a) or (c) if he establishes a guaranty or undertaking signed by, and containing the name and address of, the person residing in the United States from whom he received in good faith the article, to the effect, in case that such article complies with all the applicable provisions of the Federal Food, Drug and Cosmetic Act or of this Act. In case of the establishment of such guaranty, the person described therein shall be amenable to the prosecution and penalties which would otherwise attach to such persons receiving the guaranty. When the guaranty has been signed by a person residing outside of this State, the Board shall report such fact to the Federal Commissioner of Food and Drugs.

(c) No publisher, radio-broadcast licensee, or agency or medium for the dissemination of an advertisement, except the manufacturer, packer, distributor, or seller of the article to which a false advertisement relates, shall be liable under this section by reason of the dissemination by him of such false advertisement unless he has refused, on the request of the Board to furnish the Board the name and post office address of the manufacturer, packer, distributor, seller or advertising agency, who cause him to disseminate such advertisement.

Section 6. (a) Whenever a duly authorized agent of the Board finds or has probable cause to believe, that any food, drug, device, or cosmetic is adulterated, or so misbranded as to be dangerous or fraudulent, with the meaning of this Act, he shall affix to such article a tag or other appropriate marking, giving notice that such article is, or is suspected of being, adulterated or misbranded and has been detained or embargoed, and warning all persons not to remove or dispose of such article by sale or otherwise until permission for removal or disposal is given by such agent or the court. It shall be unlawful for any person to remove or dispose of such detained or embargoed article by sale or otherwise without such permission.

(b) When an article detained or embargoed under subsection (2) has been found by such agent to be adulterated, or misbranded, he shall petition the judge of the police, county, or circuit court in whose jurisdiction the article is detained or embargoed for a libel condemnation of such article. When such agent has found that an article so detained or embargoed is not adulterated or misbranded, he shall remove the tag or other marking.

(c) If the court finds that a detained or embargoed article is adulterated or misbranded, such article shall, after entry of the decree be destroyed at the expense of the claimant thereof, under the supervision of such agent; and all court costs and fees, and storage and other

proper expenses, shall be taxed against the claimant of such article or his agent; Provided, That when the adulteration or misbranding can be corrected by proper labeling or processing of the article, the court, after entry of the decree and after such costs, fees, and expenses have been paid and a good and sufficient bond, conditioned that such article shall be so labeled or processed, has been executed, may by order direct that such article be delivered to the claimant thereof for such labeling or processing under the supervision of an agent of the Board. Such bond shall be returned to the claimant of the article on representation to the court by the Board or its agent that the article is no longer in violation of this Act, and that the expenses of such supervision have been paid.

(d) Whenever the Board or its authorized agent shall find in any room, building, vehicle of transportation or other structure, any meat, seafood, poultry, vegetable, fruit or other perishable articles which are unsound, or contain any filthy, decomposed or putrid substance, or that may be poisonous or deleterious to health or otherwise unsafe, the same being hereby declared to be a nuisance, the Board, or its authorized agent, shall forthwith condemn or destroy the same, or in any other manner render the same unsalable as human food.

Section 7. It shall be the duty of each Commonwealth attorney, county attorney, or city attorney to whom the Board or the health officer of any county, town or city, reports any violation of this Act, to cause appropriate proceedings to be instituted in the proper courts without delay and to be prosecuted in the manner required by law. Before any violation of this Act is reported to any such attorney for the institution of a criminal proceeding, the person against whom such proceeding is contemplated shall be given appropriate notice and an opportunity to present his views before the Board or its designated agent, either orally or in writing, in person or by attorney, with regard to such contemplated proceeding.

Section 8. Nothing in this Act shall be construed as requiring the Board to report to the institution of proceedings under this Act, minor violations of this Act, whenever the Board believes that the public interest will be adequately served in the circumstances by a suitable written notice or warning.

Section 9. Whenever in the judgement of the Board such action will promote honesty and fair dealing in the interest of consumers, the Board shall promulgate regulations fixing and establishing for any food or class of food a reasonable definition and standard of identity, and, or reasonable standards of quality and, or



fill of container. In prescribing a definition and standard of identity for any food or class of food in which optional ingredients are permitted, the Board shall, for the purpose of promoting honesty and fair dealing in the interest of consumers, designate the optional ingredients which shall be named on the label. The definitions and standards so promulgated shall conform to the definitions and standards promulgated under authority conferred by Section 401 of the Federal Act and Federal Meat Inspection Act when such standards have been adopted under the Federal Act.

Section 10. A food shall be deemed to be adulterated.

(a) (1) If it bears or contains any poisonous or deleterious substance which may render it injurious to health; but in case the substance is not an added substance such food shall not be considered adulterated under this clause if the quantity of such substance in such food does not ordinarily render it injurious to health; or (2) if it bears or contains any added poisonous or added deleterious substance which is unsafe within the meaning of Section 13; or (3) if it consists in whole or in part of a diseased, contaminated, filthy, putrid or decomposed substance, or if it is otherwise unfit for food; or (4) if it has been produced, prepared, packed or held under insanitary conditions whereby it may have become contaminated with filth, or whereby it may have been rendered diseased, unwholesome or injurious to health; or (5) if it is the product of a diseased animal or an animal which has died otherwise than by slaughter, or that has been fed upon the uncooked offal from a slaughterhouse or upon uncooked garbage; or (6) if its container is composed, in whole or in part, of any poisonous or deleterious substance which may render the contents injurious to health.

(b) (1) If any valuable constituent has been in whole or in part omitted or abstracted therefrom; or (2) if any substance has been substituted wholly or in part therefor; or (3) if damage or inferiority has been concealed in any manner; or (4) if any substance has been added thereto or mixed or packed therewith so as to increase its bulk or weight, or reduce its quality or strength or make it appear better or of greater value than it is.

(c) If it is confectionery and it bears or contains any alcohol or non-nutritive article or substance except harmless coloring, harmless flavoring, harmless resinous glaze not in excess of four-tenths of 1 per centum, harmless natural wax not in excess of four-tenths of 1 per centum, harmless natural gum, and pectin; Provided, That this paragraph shall not apply to any confectionery by reason of its containing less than one-half of 1 per centum by volume

of alcohol derived solely from the use of flavoring extracts, or to any chewing gum by reason of its containing harmless non-nutritive masticatory substances.

(d) If it bears or contains a coal-tar color other than one from a batch which has been certified under the Federal Act.

Section 11. A food shall be deemed to be misbranded.

(a) If its labeling is false or misleading in any particular.

(b) If it is offered for sale under the name of another food.

(c) If it is an imitation of another food, unless its label bears, in type of uniform size and prominence, the word, imitation, and, immediately thereafter, the name of the food imitated.

(d) If its container is so made, formed, or filled as to be misleading.

(e) If in package form, unless it bears a label containing (1) the name and place of business of the manufacturer, packer, or distributor; (2) an accurate statement of the quantity of the contents in terms of weight, measure, or numerical count; Provided, That under clause (2) of this paragraph reasonable variations shall be permitted, and exemptions as to small packages shall be established by regulations prescribed by the Board.

(f) If any word, statement or other information required by or under authority of this Act to appear on the label or labeling is not prominently placed thereon with such conspicuousness (as compared with other words, statements, designs, or devices, in the labeling) and in such terms as to render it likely to be read and understood by the ordinary individual under customary conditions of purchase and use.

(g) If it purports to be or is represented as a food for which a definition and standard of identity has been prescribed by regulations as provided by Section 9, unless (1) it conforms to such definition and standard, and (2) its label bears the name of the food specified in the definition and standard, and, in so far as may be required by such regulations, the common names of optional ingredients (other than spices, flavoring, and coloring) present in such food.

(h) If it purports to be or is represented as—  
(1) A food for which a standard of quality has been prescribed by regulations as provided by Section 9 and its quality falls below such standard unless its label bears, in such manner and form as such regulations specify, a statement that it falls below such standard; or

(2) A food for which a standard or standards or fill of container have been prescribed by regulation as provided by Section 9, and it falls below the standard of fill of container applicable thereto, unless its label bears, in such manner

and form as such regulations specify, a statement that it falls below such a standard.

(i) If it is not subject to the provisions of paragraph (g) of this Section, unless it bears labeling clearly giving (1) the common or usual name of the food, if any there be, and (2) in case it is fabricated from two or more ingredients, the common or usual name of each such ingredient; except that spices, flavoring, and colorings, other than those sold as such, may be designated as spices, flavorings, and colorings, without naming each: Provided, That, to the extent that compliance with the requirements of clause (2) of this paragraph is impractical or results in deception or unfair competition, exemptions shall be established by regulations promulgated by the Board, and provided, that exemptions from the requirements of clause (2) of this paragraph shall be permitted on such foods designated under the Federal Act, Section 902, pending the formulation, promulgation and effective application of definitions and standards of identity as provided by Section 401 of the Federal Act.

(j) If it purports to be or is represented for special dietary uses, unless its label bears such information concerning its vitamin, mineral, and other dietary properties as the Board determines to be, and by regulations prescribed, as, necessary in order to fully inform purchasers as to its value for such use.

(k) If it bears or contains any artificial coloring, artificial coloring or chemical preservative, unless it bears labeling stating that fact. Provided: That to the extent that compliance with the requirements of this paragraph is impracticable, exemptions shall be established by regulations promulgated by the Board. The provisions of this paragraph and paragraph (g) (1) with respect to artificial coloring shall not apply in cases of butter, cheese and ice cream.

Section 12. (a) Whenever the Board finds after investigation that the distribution in Kentucky of any class of food may, by reason of contamination with microorganisms during manufacture, processing, or packing thereof in any locality, be injurious to health, and that such injurious nature cannot be adequately determined after such articles have entered commerce, it then, and in such case only, shall promulgate regulations providing for the issuance, to manufacturers, processors, or packers of such class of food in such locality, of permits to which shall be attached such conditions governing the manufacture, processing, or packing of such class of food, for such temporary period of time, as may be necessary to protect the public health; and after the effective date of such regulations, and during such

temporary period, no person shall introduce or deliver for introduction into commerce any such food manufactured, processed, or packed by any such manufacturer, processor, or packer unless such manufacturer, processor, or packer holds a permit issued by the Board as provided by such regulations.

(b) The Board is authorized to suspend immediately upon notice any permit issued under authority of this section if it is found that any of the conditions of the permit have been violated. The holder of a permit so suspended shall be privileged at any time to apply for the reinstatement of such permit, and the Board shall, immediately after prompt hearing and an inspection of the establishment, reinstate such permit if it is found that adequate measures have been taken to comply with and maintain the conditions of the permit, as originally issued, or as amended.

(c) Any officer or employee duly designated by the Board shall have access to any factory or establishment, the operator of which holds a permit from the Board for the purpose of ascertaining whether or not the conditions of the permit are being complied with and denial of access for such inspection shall be ground for suspension of the permit until such access is freely given by the operator.

Section 13. Any poisonous or deleterious substance added to any food except where such substance is required in the production thereof or cannot be avoided by good manufacturing practice, shall be deemed to be unsafe for purposes of the application of clause (2) of Section 10 (a); but when such substance is so required or cannot be so avoided, the Board shall promulgate regulations limiting the quantity therein or thereon to such extent as the Board finds necessary for the protection of public health, and any quantity exceeding the limits so fixed shall also be deemed to be unsafe for purposes of the application of clause (2) of Section 10 (a). While such a regulation is in effect limiting the quantity of any such substance in the case of any food, such food shall not, by reason of bearing or containing any added amount of such substance, be considered to be adulterated within the meaning of clause (1) Section 10 (a). In determining the quantity of such added substance to be tolerated in or on different articles of food, the Board shall take into account the extent to which the use of such substance is required or cannot be avoided in the production of each such article, and the other ways in which the consumer may be affected by the same or other poisonous or deleterious substances.

Section 14. A drug or device shall be deemed to be adulterated:

(a) (1) If it consists in whole or in part of



any filthy, putrid or decomposed substance; or (2) if it has been produced, prepared, packed, or held under insanitary conditions whereby it may have been contaminated with filth, or whereby it may have been rendered injurious to health, or (3) if it is a drug and its container is composed, in whole or in part, of any poisonous or deleterious substance which may render the contents injurious to health; or (4) if it is a drug and it bears or contains, for purposes of coloring only, a coal-tar color other than one from a batch that has been certified in accordance with the regulations as provided by the Federal Act.

(b) If it purports to be or is represented as a drug the name of which is recognized in an official compendium, and its strength differs from, or its quality or purity falls below, the standard set forth in such compendium. Such determination as to strength, quality, or purity shall be made in accordance with the tests or methods of assay set forth in such compendium, or prescribed in regulations promulgated under Sec. 501 (b) of the Federal Act. No drug defined in an official compendium shall be deemed to be adulterated under this paragraph because it differs from the standard of strength, quality, or purity, therefor set forth in such compendium, if its difference in strength, quality or purity from such standard is plainly stated on its label. Whenever a drug is recognized in both the United States Pharmacopoeia and the Homoeopathic Pharmacopoeia of the United States it shall be subject to the requirements of the United States Pharmacopoeia unless it is labeled and offered for sale as a homoeopathic drug, in which case it shall be subject to the provisions of the Homoeopathic Pharmacopoeia of the United States and not to those of the United States Pharmacopoeia. Whenever a drug is recognized in both the National Formulary and the Homoeopathic Pharmacopoeia of the United States, it shall be subject to the requirements of the National Formulary unless it is labeled and offered for sale as a homoeopathic drug, in which case it shall be subject to the provisions of the Homoeopathic Pharmacopoeia of the United States and not to those of the National Formulary.

(c) If it is not subject to the provisions of paragraph (b) of this Section and its strength differs from, or its purity or quality falls below, that which it purports or is represented to possess.

(d) If it is a drug and any substance has been (1) mixed or packed therewith so as to reduce its quality or strength; or (2) substituted wholly or in part therefor.

Section 15. A drug or device shall be deemed to be misbranded:

(a) If its labeling is false or misleading in any particular.

(b) If in package form unless it bears a label containing (1) the name and place of business of the manufacturer, packer, or distributor; and (2) an accurate statement of the quantity of the contents in terms of weight, measure, or numerical count: Provided, That under clause (2) of this paragraph reasonable variations shall be permitted, and exemptions as to small packages shall be established, by regulations prescribed by the Board.

(c) If any word, statement, or other information required by or under authority of this Act to appear on the label or labeling is not prominently placed thereon with such conspicuousness (as compared with other words, statements, designs, or devices, in the labeling) and in such terms as to render it likely to be read and understood by the ordinary individual under customary conditions of purchase and use.

(d) If it is for use by man and contains any quantity of the narcotic or hypnotic substance alpha-eucaine, beta-eucaine, bromal, cannabis, carbromal, chloral, coca, cocaine, codeine, heroin, marihuana, morphine, opium, paraldehyde, peyote, or sulphonmethane; or any chemical derivative of such substance, which derivative has been by the Board, after investigation, found to be and by regulations under this Act, designated as, habit forming; unless its label bears the name and quantity or proportion of such substance or derivative and in juxtaposition therewith the statement "Warning—May be habit forming."

(e) If it is a drug and is not designated solely by a name recognized in an official compendium unless its label bears (1) the common or usual name of the drug, if such there be; and (2), in case it is fabricated from two or more ingredients, the common or usual name of each active ingredient, including the kind and quantity or proportion of any alcohol, and also including, whether active or not, the name and quantity of proportion of any bromides, ether, chloroform, acetanilid, acetphenetidin, aminopyrine, antipyrine, atropine, hyoscine, hyoscyamine, arsenic, digitalis, digitalis glucosides mercury, ouabain, strophanthin, strychnine, thyroid, or any derivative or preparation of any such substances, contained therein: Provided, That to the extent that compliance with the requirements of clause (2) of this paragraph is impracticable, exemptions shall be established by regulations promulgated by the Board.

(f) Unless its label bears (1) adequate directions for use; and (2) such adequate warnings against use in those pathological conditions or by children where its use may be dangerous to health, or against unsafe dosage or methods or

duration of administration or application, in such manner and form, as are necessary for the protection of users: Provided, That where any requirement of clause (1) of this paragraph, as applied to any drug or device, is not necessary for the protection of the public health, the Board shall promulgate regulations exempting such drug or device from such requirements.

(g) If it purports to be a drug, the name of which is recognized in an official compendium, unless it is packaged and labeled as prescribed therein: Provided, That the method of packing may be modified with the consent of the Board, in accordance with regulations promulgated under Sec. 502 (g) of the Federal Act. Whenever a drug is recognized in both the United States Pharmacopoeia and the Homoeopathic Pharmacopoeia of the United States, it shall be subject to the requirements of the United States Pharmacopoeia with respect to packaging and labeling unless it is labeled and offered for sale as a homoeopathic drug, in which case it shall be subject to the provisions of the Homoeopathic Pharmacopoeia of the United States, and not to those of the United States Pharmacopoeia. Whenever a drug is recognized in both the National Formulary and the Homoeopathic Pharmacopoeia of the United States, it shall be subject to the requirements of the National Formulary with respect to packaging and labeling unless it is labeled and offered for sale as a homoeopathic drug, in which case it shall be subject to the provisions of the Homoeopathic Pharmacopoeia of the United States and not to those of the National Formulary.

(h) If it has been found by the Board to be a drug liable to deterioration, unless it is packaged in such form and manner, and its label bears a statement of such precautions, as the Board shall by regulations require as necessary for the protection of public health. No such regulation shall be established for any drug recognized in an official compendium until the Board shall have informed the appropriate body charged with the revision of such compendium of the need for such packaging or labeling requirements and such body shall have failed within a reasonable time to prescribe such requirements.

(i) (1) If it is a drug and its container is so made, formed or filled as to be misleading; or (2) if it is an imitation of another drug; or (3) if it is offered for sale under the name of another drug.

(j) If it is dangerous to health when used in the dosage, or with the frequency or duration prescribed, recommended, or suggested in the labeling thereof.

(k) If it is a drug sold at retail, and contains any quantity of aminopyrine, barbital, the

salts of barbituric acid, cinchophen, dinitrophenol, sulfapyridine, or sulfanilamide, or their derivatives or any other drug which is determined to be dangerous to health when used in the dosage or with the frequency or duration prescribed, or suggested in the labeling thereof, unless it is sold or dispensed by a registered pharmacist on a written prescription signed by a member of the medical, dental or veterinary profession who is licensed by law to administer such drug, and its label bears the name and place of business of the seller, the serial number and date of such prescription, and the name of such member of the medical, dental or veterinary profession.

(1) A drug sold on a written prescription signed by a member of the medical, dental or veterinary profession (except a drug sold in the course of the conduct of a business of selling drugs pursuant to diagnosis by mail) shall be exempt from the requirements of this section if —(1) such member of the medical, dental or veterinary profession is licensed by law to administer such drug, and (2) such drug bears a label containing the name and place of business of the seller, the serial number and the date of such prescription, and the name of such member of the medical, dental or veterinary profession.

Section 16. (a) No person shall sell, deliver, offer for sale, hold for sale or give away any new drug unless (1) an application with respect thereto has become effective under Section 505 of the Federal Act, or (2) when not subject to the Federal Act unless such drug has been tested and has been found to be safe for use under the conditions prescribed, recommended or suggested in the labeling thereof, and prior to selling or offering for sale such drug, there has been filed with the Board an application setting forth (a) full reports of investigations which have been made to show whether or not such drug is safe for use; (b) a full list of the articles used as components of such drugs; (c) a full statement of the composition of such drug; (d) a full description of the methods used in, and the facilities and controls used for, the manufacture, processing and packing of such drug; (e) such samples of such drug and of the articles used as components thereof as the Board may require, and (f) specimens of the labeling proposed to be used for such drug.

(b) An application provided for in subsection (a) (2) shall become effective on the 120th day after the filing thereof, except that if the Board finds after due notice to the applicant and giving him an opportunity for a hearing, that the drug is not safe for use under the conditions prescribed, recommended or suggested in the proposed labeling thereof, the Board shall prior to the effective date of the application, issue



an order refusing to permit the application to become effective.

(c) This section shall not apply:

(1) to a drug intended solely for investigational use by experts qualified by scientific training and experience to investigate the safety in drugs provided the drug is plainly labeled "For investigational use only;" or (2) to a drug sold in this State at any time prior to the enactment of this Act or introduced into interstate commerce at any time prior to the enactment of the Federal Act; or (3) To any drug which is licensed under the virus, serum, and toxin Act of July 1, 1902 (U. S. C. 1934 ed. title 42, Chap. 4.)

(d) An order refusing to permit an application under this section to become effective may be revoked by the Board.

Section 17. A cosmetic shall be deemed to be adulterated:

(a) If it bears or contains any poisonous or deleterious substance which may render it injurious to users under the conditions of use prescribed in the labeling or advertisement thereof, or under such conditions of use as are customary or usual; Provided, That this provision shall not apply to coal-tar hair dye, the label of which bears the following legend conspicuously displayed thereon: "Caution—This product contains ingredients which may cause skin irritation on certain individuals and a preliminary test according to accompanying directions should first be made. This product must not be used for dyeing the eyelashes or eyebrows; to do so may cause blindness," and the labeling of which bears adequate directions for such preliminary testing. For the purpose of this paragraph and paragraph (e) the term "hair dye" shall not include eyelash dyes or eyebrow dyes.

(b) If it consists in whole or in part of any filthy, putrid or decomposed substance.

(c) If it has been produced, prepared, packed or held under insanitary conditions whereby it may have become contaminated with filth, or whereby it may have been rendered injurious to health.

(d) If its container is composed, in whole or in part, of any poisonous or deleterious substance which may render the contents injurious to health.

(e) If it is not a hair dye and it bears or contains a coal-tar color other than one from a batch which has been certified under the Federal Act.

Section 18. A cosmetic shall be deemed to be misbranded.

(a) If its labeling is false or misleading in any particular.

(b) If in package form unless it bears a

label containing (1) the name and place of business of the manufacturer, packer, or distributor; and (2) an accurate statement of the quantity of the contents in terms of weight, measure or numerical count: Provided, That under clause (2) of this paragraph reasonable variations shall be permitted, and exemptions as to small packages shall be established by regulations prescribed by the Board.

(c) If any word, statement, or other information required by or under authority of this Act to appear on the label or labeling is not prominently placed thereon with such conspicuousness (as compared with other words, statements, designs, or devices, in the labeling) and in such terms as to render it likely to be read and understood by the ordinary individual under customary conditions of purchase and use.

(d) If its container is so made, formed, or filled as to be misleading.

Section 19. (a) An advertisement of a food, drug, device, or cosmetic shall be deemed to be false if it is false or misleading in any particular.

(b) For the purpose of this Act the advertisement of a drug or device representing it to have any effect in albuminuria, appendicitis, arteriosclerosis, blood poison, bone disease, Bright's disease, cancer, carbuncles, cholecystitis, diabetes, diphtheria, dropsy, erysipelas, gallstones, heart and vascular diseases, high blood pressure, mastoiditis, measles, meningitis, mumps, nephritis, otitis, media, paralysis, pneumonia, poliomyelitis (Infantile paralysis), prostate gland disorders, pyelitis, scarlet fever, sexual impotence, sinus infection, smallpox, tuberculosis, tumors, typhoid, uremia, venereal disease, shall also be deemed to be false; except that no advertisement not in violation of subsection (a) shall be deemed to be false under this subsection if it is disseminated only to members of the medical, dental, pharmacy or veterinary professions, or appears only in the scientific periodicals of those professions, or is disseminated only for the purpose of public-health education by persons not commercially interested, directly or indirectly, in the sale of such drugs or devices; Provided, That whenever the Board determines that an advance in medical science has made any type of self-medication safe as to any of the diseases named above, the Board shall by regulation authorize the advertisement of drugs having curative or therapeutic effect for such disease, subject to such conditions and restrictions as the Board may deem necessary in the interests of public health: Provided, That this subsection shall not be construed as indicating that self-medication for diseases other than those named herein is safe or efficacious.

Section 20. (a) The authority to promul-

gate regulations for the efficient enforcement of this Act is hereby vested in the Board. The Board is hereby authorized to make the regulations promulgated under this Act conform, in so far as practicable and applicable with those promulgated under the Federal Act.

(b) Hearings authorized or required by this Act shall be conducted by the Board or such officer, agent, or employee as the Board may designate for the purpose.

(c) Before promulgating any regulation contemplated by section 9; 11 (i) (j) (k); 15 (b), (f), (g) and (h), 18 (b), or 19 (b) the Board shall give appropriate notice of the proposal and of the time and place for a hearing. The regulation so promulgated shall become effective on a date fixed by the Board (which date shall not be prior to ninety days after its promulgation). Such regulation may be amended or repealed in the same manner as is provided for its adoption; except that in the case of a regulation amending or repealing any such regulation the Board, to such an extent as it deems necessary in order to prevent undue hardship, may disregard the foregoing provisions regarding notice, hearing, or effective date.

(d) A certified copy of the transcript of the record and proceedings under subsection (b) may be obtained if the costs of same are assumed by the interested party and request is made prior to the hearing.

Section 21. It shall be the duty of the Board to make or cause to be made, examination of samples of foods, drugs, cosmetics and devices manufactured or on sale or dispensed in Kentucky at such time and place and to such extent as it may determine. It shall also make, or cause to be made, analysis of any sample of food, drug, device or cosmetic which it or any health official in the state may suspect of being adulterated or misbranded. And the Board shall appoint such agent or agents or inspectors as it may deem necessary who shall have free access at all reasonable hours to any factory, warehouse, or establishment in which foods, drugs, devices or cosmetics are manufactured, processed, packed or held for introduction into commerce, or to enter any vehicle being used to transport or hold such foods, drugs, devices, or cosmetics in commerce, for the purpose:

(1) of inspecting such factory, warehouse, establishment, or vehicle to determine if any of the provisions of this Act are being violated, and

(2) to secure samples of specimens of any food, drug, device or cosmetic after paying or offering to pay for such samples. It shall be the duty of the Board to make or cause to be made examinations of samples secured under the provisions of this section to determine

whether or not any provision of this Act is being violated: Provided, That when requested at the time of securing samples, the authorized agent of the Board shall prepare a duplicate official sample of the food, drug, device or cosmetic for the owner.

Section 22. (a) The Board may cause to be published from time to time reports summarizing all judgments, decrees, and court orders which have been rendered under this Act, including the nature of the charge and the disposition thereof.

(b) The Board may also cause to be disseminated such information regarding food, drugs, devices and cosmetics as the Board deems necessary in the interest of public health and the protection of the consumer against fraud. Nothing in this section shall be construed to prohibit the Board from collecting, reporting, and illustrating the results of the investigations of the Board.

Section 23. (a) After thirty (30) days from the effective date of this Act, it shall be unlawful to sell any food, drug, device or cosmetic, unless the manufacturer, processor, or packer thereof, or his agent residing in the State of Kentucky holds an unexpired certificate of registration covering such article issued by the Board: Provided, That farm produce sold as such, food prepared in restaurants and other eating places exclusively for service therein, drugs compounded in retail pharmacies for sale therein or dispensed on written prescription of members of the medical, dental or veterinary profession, meat and meat products subject to the Meat Inspection Act approved March 7, 1907, as amended (U. S. C. 1934 ed. title 21, secs. 71-91; 34 stat. 1260 et seq.) and products subject to the Virus Serum and Toxin Act of July 1, 1902 (U. S. C. 1934 ed., title 42 chap. 4), and articles included in the official United States Pharmacopoeia and the official Homoeopathic Pharmacopoeia and official National Formulary or any supplement to any of these when sold under the name of the article as is recognized in the official compendium, and foods, manufactured, processed or packed in retail establishments for sale therein, shall be exempt from this provision: Provided further, That this provision shall not apply to articles for which an application for a certificate of registration has been made prior to thirty days after the effective date of this Act in accordance with the provisions of sub-section (b), while such application is pending and unacted upon by the Board.

(b) The Board upon receipt of applications for certificates of registration accompanied by a fee of one dollar (\$1.00) for each article covered by such application and by complete labeling and statement of composition or list of



ingredients for each such article, or, in case of a device, complete labeling and a specimen or workers drawing thereof shall issue such certificates to the applicants. Provided: That the registration fees from any one manufacturer, packer or processor shall not exceed Ten (\$10.00) Dollars annually, regardless of the number of articles registered. All certificates shall expire on December 31st of each year. The issuance of such certificate shall not relieve the article covered thereby from compliance with the other provisions of this Act.

(c) The Board shall refuse the issuance of a certificate of registration for any article which, in the judgment of the Board, is injurious or detrimental to the consumer, or in violation of this Act. Temporary certificates of registration may be issued by the Board for any article pending investigation of such article when in the judgment of the Board the welfare of consumers will not be endangered thereby.

(d) All fees collected under the provisions of this Section shall be put into the State Treasury and shall be kept as a separate fund and used for paying the expenses of the administration and enforcement of this Act, and shall be accounted for as required by law for other funds and expenses of the Board.

(e) Foods, drugs, devices, and cosmetics subject to registration under sub-section (a) but which have not been so registered, and the vessels in which they are contained, are contraband and shall be subject to embargo or detained by the procedure provided by Section 15: Provided that any lot of foods, drugs, cosmetics, or devices manufactured in Kentucky or imported into Kentucky prior to the effective date of this Act shall not be subject to this section and provided, further, that no lot of foods, drugs, cosmetics or devices in possession of a retailer or wholesaler in Kentucky shall be subject to embargo as provided in this paragraph if the certificate of registration of such food, drug, cosmetic or device has been held by the manufacturer, processor, or packer thereof, or his agent residing in the State of Kentucky at the time of such sale to retailer or wholesaler in Kentucky.

Section 24. The Board may provide for the analysis or examination of any sample of food, drug, cosmetic or device taken or submitted in accordance with the provisions of this Act, and for procuring samples of food, drugs, cosmetics or devices, and for making inspections into the condition and wholesomeness and purity of the food, drugs, cosmetics and devices produced, prepared and manufactured, stored or kept or offered for sale; for studying the problems connected with the production, preparation and sale of foods, drugs, cosmetics or devices, investi-

gations for standards, expert witnesses attending the grand juries and courts, clerk hire, and all other expenses necessary for carrying out the provisions of this Act, including salary of the experts employed in the work.

Section 25. That the experiment station of the University of Kentucky, in its chemical, bacteriological or research laboratories that are, or may be, established, shall make such analytical, chemical or bacteriological examinations of samples of foods, drugs, cosmetics, devices, or their labels as herein provided, drinking waters, ice, sewage, specimens of fluids, discharges or excretions from the body of humans or other animals suspected of being diseased to determine the presence of typhoid fever, meningitis, tuberculosis, venereal diseases, pneumonia, diphtheria and such other diseases as may be named by the Board; the brains of animals for examinations for rabies, that may be submitted to said station by the Board in the discharge of said Board's duties, and shall conduct promptly and efficiently this and such other laboratory work for the Board as the laws of the commonwealth require of said Board. In the presence of an outbreak, or impending outbreak, of cholera, yellow fever, plague, cerebrospinal meningitis, infantile paralysis or other pestilences, said laboratory shall equip and conduct such an emergency laboratory at any place as may be needed or demanded by the Board for the prompt location, diagnosis and suppression of such pestilence, the cost of which laboratory to be paid out of the "contingent fund" provided for the use of said Board for such purposes.

Section 26. The University of Kentucky shall employ a director of the laboratories for the work of the Board, whose qualifications shall include technical and scientific training and experience in public health work, and if at any time the Board finds that such director is incompetent, neglectful or unsuited for the work upon the written request of said Board, the University of Kentucky shall forthwith employ another director to be chosen as herein provided. The University may appoint such assistants as may be necessary for the conduct of the work of the laboratories. The compensation of said director and assistants shall be paid in the same manner as instructors in the University of Kentucky. The director of said laboratory or laboratories, at the direction of the State Board of Health, shall keep and furnish such a supply of shipping and mailing containers and other laboratory equipments and supplies as may be necessary to execute the work of the Board.

Section 27. The said Board may fix reasonable fees for the examination of samples of foods, drugs, cosmetics, devices, or labels for

the same, submitted by manufacturers or dealers, for the purpose of determining as to whether any such products or labels comply with the provisions of this law, and reasonable fees for the examination of labels and inquiry into other matters connected with the enforcement of this act, and which may be requested by the said Board. Whenever a sample has been found to be adulterated or misbranded, the Court shall assess as costs such fee as to cover the costs of investigation and analysis, and all such fees, so collected, shall be paid to the auditor of public accounts, and set aside as a fund for the further enforcement of this Act; provided, that the dealers can prove that the adulterated or misbranding was the fault of the manufacturer, then the dealer is not liable for the cost of investigation or analysis.

Section 28. The said Board shall analyze or cause to be analyzed samples submitted by county and city officers, provided such samples are submitted in accordance with the terms of said Act; and the Board shall have the right to require county and city health officers or their agents to make inspections and to collect and send samples for examination and to call upon all other county and city officials for assistance in carrying this act into effect. As means for further carrying out the provisions of this act, the experts employed under the provisions of this act shall give instructions, free of cost, to any county or city health officer or employee of any county or city health department, who may request the same, in matters pertaining to the inspection and practical remedies for insanitary conditions in the preparation, storage and sale of foods, drugs, devices, and cosmetics, examination of samples, and similar matters; and such courses of instruction may be conducted in connection with other courses of instruction at the laboratory of the Board or State University or State Normal schools, or at the annual school for health officers, as provided by law.

Section 29. Any inspector or inspectors appointed by said Board for the purpose of carrying out the provisions of this act insofar as it relates to drugs, except in circumstances as designated by the Kentucky Board of Pharmacy, shall be a registered pharmacist and a graduate of a school recognized as in good standing by the Kentucky Board of Pharmacy and the appointment of such inspector or inspectors shall be made by the State Board of Health upon the nomination of the pharmacist member.

Section 30. If any provision of this Act is declared unconstitutional or the applicability thereof to any person or circumstances is held invalid, the constitutionality of the remainder of the Act and applicability thereof to other

persons and circumstances shall not be affected thereby.

Section 31. This act shall take effect on January 1st, 1943. The Kentucky Statute Section 2060 and Sections 2060a-1 through 19, shall remain in force until such effective date and are hereby repealed, effective upon such date: Provided, That the provisions of section 20 shall become effective July 1, 1942 and thereafter the Board is authorized hereby to (1) conduct hearings and to promulgate regulations which shall become effective on or after the effective date of this Act as the Board shall direct, and (2) designate prior to the effective date of this Act, foods having common or usual names and exempt such foods from the requirements of clause (2) of section 11 (i) for a reasonable time to permit the formulation, promulgation, and effective application of definitions and standards of identity therefor as provided by section 9. All other statutes in conflict with this Act are hereby repealed, effective upon such date: Provided further, That this Act shall not repeal the Pharmacy Laws, the laws relating to the practice of medicine or the other healing arts, or the Prophylactic Law.

I ask that each and every one of you give careful consideration to this bill when it appears in the November issue of the JOURNAL, so that you may discuss with each and every representative of your district the advantages which it will give for the protection of our citizens in regard to the various matters with which it deals.

At our session last year, you approved in principle the bill providing for the registration of hospitals. This legislation was defeated because of the misunderstanding of its provisions by the smaller hospitals. It is important to remember that efficient medical registration was delayed from 1851 to 1888 because of similar misunderstanding and jealousy on the part of members of our profession who objected to any legislation that would control the standards of medical education. Just as it was essential throughout these years to develop standards for the education and training of physicians, it has now become essential for a standardization, at different levels of the regulations governing hospitals, which have become essential facilities for the treatment of the sick. The threat, in many states, of hospitals becoming "big business" instead of continuing to be service organizations for the care of the sick, is evident. You may recall the editorial in the JOURNAL of the American Medical Association last month dealing with this par-



ticular subject. In a rural state like Kentucky, the importance of the preservation and extension of the small hospitals, which are accessible to the people of the state, is one of our most important responsibilities.

It is equally evident that the medical service in such a hospital is being provided for and is under the control of the medical profession, and this is equally essential. The bill which you have heretofore approved in principle will be presented to the Legislative Council and the General Assembly with certain changes which have been suggested by those who have knowledge of the needs in hand. This bill is also made a part of this particular report, and it, too, will be published in the November issue of the JOURNAL. The committee requires of you again that you peruse it carefully in order that you may discuss it with your representatives in the Assembly. The bill reads as follows:

#### TEXT OF THE HOSPITAL REGISTRATION LAW

##### ARTICLE I—Definitions.

Section 1. Hospitals. The word hospital, as herein employed, means any institution which maintains and operates organized facilities for the diagnosis and/or care, and/or treatment of human illness or injury, including convalescence, and/or care during and after pregnancy, where persons may be admitted for overnight stay or longer.

Section 2. Clinics. The word clinic, as herein employed, means any place, except the private office of a person holding a valid certificate as a duly licensed practitioner of the healing art, in which are maintained and operated organized facilities for the diagnosis and/or treatment of human illness or injury, and/or conduct of physical, mental or obstetrical examinations, which serves only persons who remain in said place for less than overnight stay.

##### ARTICLE II—Obligatory Licensure.

Section 3. Unlawful Maintenance or Operation. It shall be unlawful for any person, co-partnership, association, corporation or governmental authority to maintain or operate any hospital and/or clinic without a license as herein required.

Section 4. It is unlawful for any hospital or clinic to engage in the practice of medicine as defined in Section 2615-2 Baldwin's Kentucky Statutes, Carroll's 1936 Edition, or in the practice of dentis-

try as defined in Sections 2636-14 of Baldwin's Kentucky Statutes, Carroll's 1936 Edition. It is the purpose of this Act to preserve and gradually improve the high standards of hospitals and clinic care of the great voluntary and public hospitals now recognized in Kentucky by the national professional organizations approving them; and to provide additional or new facilities necessary for the practice of medicine and/or the other branches of the healing arts, or dentistry, in hospitals or clinics where need for them exists and where they can be maintained; and to preserve the private practice of medicine, the confidential relationships between physician or dentist and patient; and the free choice by the people of a practitioner of the healing arts, including dentistry, amongst those authorized to practice under the Medical Practice Act and/or the Dental Practice Act.

Section 5. Application for License. (a) Every applicant for license shall file with the State Board of Health a written application on a form prescribed by the State Board of Health which shall state, together with other information as the State Board of Health may require:

(1) The names and addresses of the officers of any corporation or organization conducting any hospital and/or clinic, and the names and addresses of the owners and officers of any private hospital and/or clinic and/or of the person or persons in charge thereof.

(2) A statement as to whether the professional staff is open or closed, and the names and addresses of the professional staff and its officers and a statement as to whether guest physicians or guest dentists are entitled to use the facilities of the hospital and/or clinic, and if so, the names and addresses of such guest physicians or dentists.

(3) The nature and financial structure of the organization of the hospital and/or clinic, whether proprietary, voluntary, or governmental.

(4) The location with a plan of the premises including detail of plumbing and electrical layout.

(5) A description of the types of services intended to be rendered, and the capacities and facilities of the building thereof.

(6) The number of interns and resident physicians if any.

PROVIDED, that no intern shall be ap-

pointed or employed who is not eligible to examination under the Medical Practice Act and no resident physician shall be appointed or employed who is not authorized by law to practice medicine in Kentucky.

(b) The State Board of Health, with the assistance of the Hospital Advisory Committee, shall make a thorough investigation of all applications for license. Before any application is rejected, the State Board of Health shall give thirty days' notice to the applicant, who may, at his option, be heard in person, or by counsel, and may present such evidence as he desires to show cause for the issuance of such license.

Section 6. Duration, Display and Renewal of Licenses. All licenses shall expire one year after issuance, shall not be transferable, and shall apply only to the premises named in the application, shall be conspicuously displayed on the licensed premises, and may be renewed upon satisfying the State Board of Health that such renewal serves the public interest.

ARTICLE III—Creation of Hospital Advisory Committee.

Section 7. Advisory Committee Created, Qualifications, Manner, Term of Appointment of Members.

The State Board of Health shall be authorized to administer this Act. A Hospital Advisory Committee to the State Board of Health of five members is hereby created, for the purpose of this Act; and the Director of the Division of Hospitals in the Bureau of Medical Service of the State Board of Health shall be the Secretary of the State Hospital Advisory Committee, but shall not be a member. Three of said members shall be hospital administrators, actively engaged as the chief executive of hospitals in this state; at least two of the three shall be from general hospitals, and at least one of the three shall be a nurse administrator. The other two members shall be physicians who have had five years' experience as members of a hospital staff, one of whom shall be selected from hospitals in cities of the first, second or third class, and the other of whom shall be selected from a rural hospital.

Members of the Hospital Advisory Committee shall be appointed by the State Board of Health from nominations submitted as follows:

The Board of Trustees of the Kentucky State Hospital Association shall submit

three nominees for each hospital administrator to be appointed, and the Council of the Kentucky State Medical Association shall submit three nominees for each physician to be appointed. The term of office shall be for three years. In the appointment of the initial Advisory Committee, the nurse administrator shall be appointed for one year, one hospital administrator and one physician for two years, and the remaining hospital administrator and physician for three years. Thereafter, such appointment shall be for three years. The members of the Hospital Advisory Committee shall serve without pay, but they shall be reimbursed for actual traveling expenses to called meetings.

ARTICLE IV—Power and Duties of the Board.

Section 8. The Committee is authorized to advise the State Board of Health with reference to the carrying out of the provisions of the Act including:

(a) The review of applications for licenses for hospitals and/or clinics submitted in accordance with and meeting the requirements of Section V of this Act, and recommendation of such projects as in its opinion are needed, will be adequately maintained, and otherwise will fulfill the requirements of this Act.

(b) The formulation of standards which are necessary to insure proper conduct of hospitals and/or clinics and care of persons served by hospitals and/or clinics.

(c) The formulation of rules and regulations necessary to carry out the provisions of this Act.

(d) The review of reports and inspections, and, when necessary, the making of inspections with reference to professional service and standards of maintenance of the hospitals and/or clinics.

Section 9. Issue of Licenses. When satisfied that all requirements of this Act and the rules and regulations of the State Board of Health have been complied with, that there is a reasonable need for the services proposed to be provided and that the granting of a license will otherwise serve the public interest in protecting the public health by providing facilities for good medical and/or dental practice, the State Board of Health shall issue a license to the applicant. Before final action is taken by the State Board of Health in the granting of a license, the application shall be submitted to the Hospital Advisory



Committee for its recommendation.

Section 10. Appointment of Administrator and Assistants. The State Commissioner of Health shall administer the provisions of this Act and the rules and regulations of the State Board of Health. The State Board of Health shall have the power to employ the service of inspectors and other necessary assistants in the administration of this Act.

Section 11. Rules and Regulations. The State Board of Health shall make and enforce reasonable rules and regulations consistent with the law, for the issuance of licenses, for the proper maintenance, operation and conduct, and for the visitation and inspection of all licensed hospitals and/or clinics. Such rules and regulations shall classify and apply to institutions according to their location, facilities, nature of their organization and the type of service provided; shall establish standards of medical and administrative efficiency for each such classification, and shall require that adequate records be kept and that periodic statistical and financial reports be rendered to the State Board of Health. Rules and regulations authorized in this action shall, before approval, be referred to the Hospital Advisory Committee, the Council of the State Medical Association, and the Board of Trustees of the Kentucky Hospital Association, and each of said bodies shall have thirty days from the receipt of such proposed regulations by their Chairman, in which to suggest changes and amendments, before said rules and regulations shall be adopted and promulgated.

Section 12. Visitation and Inspection. The State Board of Health, any member of the Hospital Advisory Committee and the duly authorized representative of the State Board of Health, shall have free and full access to the grounds and buildings and to the records of all licensed hospitals and/or clinics, and full opportunity to interview any of the personnel and patients therein. It shall be the duty of the State Board of Health to make, or cause to be made, periodic visitation and inspection of all institutions licensed under this Act.

Section 13. Revocation and Suspension of Licenses. Whenever the State Board of Health shall discover any violation of this Act, or of its rules and regulations, it shall give written notice thereof to the offending licensee, which notice shall contain a copy of the complaint, and the

Licensee shall be given at least thirty days in which to prepare for a hearing and he shall be heard in person, or by the counsel, or both, as he may elect, and the procedure in said hearing and the appeal therefrom shall be the same as provided for the revocation and/or suspension of a certificate to practice medicine in Section 2615 of the Kentucky Statutes. The State Board of Health may suspend or revoke the license, if such violation, as found after the hearing, does not cease within three months, or such reasonable time as the State Board of Health may determine to be necessary, after such written notice. In any proceedings under this Section, the Hospital Advisory Committee shall sit with the State Board of Health and it shall make recommendations to the State Board of Health before its decision shall be rendered.

Section 14. Restraint of Violations. The State Board of Health shall have power to institute legal proceedings in its own name to restrain and enjoin the violation of any of the provisions of this Act and of any of the rules and regulations made pursuant to this Act.

Section 15. In carrying out the purposes of this Act, the State Board of Health is authorized and directed, after consultation with the Committee:

(a) To conduct, assist and foster studies and surveys with respect to needs for hospitalization and problems of hospital and/or clinic operation.

(b) To approve hospital and/or clinic projects, to designate their location, type, equipment and size of hospital and/or clinic and to allocate available funds to such approved projects.

(c) To provide training and instruction of personnel who will be required in connection with hospitals and/or clinics.

(d) To cooperate with physicians, county health, fiscal and school authorities, and with state and county welfare authorities; with fiscal health and welfare authorities of cities and with professional agencies.

(e) To secure reports and make inspections with respect to professional service and standards of maintenance of hospitals and/or clinics and other matters pertinent to carrying out the purposes of this Act.

(f) To adopt such additional means as may be found necessary or appropriate to carry out the provisions of this Act, including the safeguarding of the quality of service furnished in hospitals and/or clinics.

Section 16. No county, city or other political subdivision, or part thereof, alone or in combination, and no individual, partnership or corporation, shall seek to raise funds nor secure title of land, or other property for the purpose of erecting, establishing or building a hospital and/or clinics in this state until the provisions of this Act have been complied with.

Section 17. New Construction.

(a) After this Act shall become effective, the approval of the State Board of Health must be secured before any new hospital or clinic may be organized and/or construction begun, and before any alterations or additions shall be made to existing hospitals or clinics. The State Board of Health shall make such investigations of the proposed organization and the need for the additional hospital or clinic facilities proposed, and after a public hearing is held at which all interested parties are heard, it may approve or disapprove such proposed organization and/or construction after consideration whether the public convenience and necessity require the operation of said hospital.

(b) In granting or refusing to grant such approval, the State Board of Health shall take into consideration the need for the proposed hospital or clinic facilities in the territory to be served, the adequacy of financial support for continued maintenance of such hospitals or clinics, the availability of physicians for the rendering of necessary medical care, and the public convenience and necessity which is involved in the granting of such approval.

(c) After the State Board of Health has approved the organization of a new hospital or clinic, the complete plans and specifications of construction must be approved by the State Board of Health before construction is begun. The approval of the State Board of Health shall be based upon fireproof construction, compliance with the Plumbing Code of the State, and general sanitary provision for the well being of the persons to be served.

(d) The recommendation of the Hospital Advisory Committee shall be secured by the State Board of Health before final action is taken on such approvals as are required in this section.

ARTICLE V—Miscellaneous Provisions.

Section 18. Judicial Review. Any action by the State Board of Health refusing to issue or renew a license or revok-

ing or suspending a license may be reviewed by an appeal to the Franklin Circuit Court, which shall review the record and findings of the State Board of Health.

Section 19. Constitutionality. If any section or part of this Act shall be held unconstitutional, or inoperative, for any reason, no other section, or any part of this Act, shall be affected thereby, and the remainder thereof shall continue in full force and effect.

Another problem which has presented itself with increasing seriousness to the managements of our large and small hospitals alike is the increasing number of the seriously injured patients brought to them from automobile and airplane accidents. The economic situation cannot be met by the hospitals alone. The financial burden is beyond the ability of any of them to carry without organized help from the state. For this reason, last year you approved the bill adding a charge of one dollar to the automobile registration fee to be earmarked for the purpose of paying for the hospital and medical care of such cases. This legislation is of the utmost importance, and even in a year when the tax burden has been increased because of national defense activities, you should urge upon our legislators some practical solution of this vexing problem.

It is perfectly apparent that it is unfair to ask the medical profession and the hospital organizations of Kentucky to carry a burden which is entirely beyond their resources, and which is produced by practically all of the people of the state who use automobiles, airplanes, and similar means of travel.

In pursuance of policies which have been developed since the first session of the Association in 1851, your Advisory Committee on Mental Hygiene will present further recommendations in the development of a sound program for the care of the mentally ill and the prevention of mental illness. For the report of this Committee we bespeak your enthusiastic endorsement.

Your Committee on Medical Economics has spent two years in exploring the essential features of a sound program for the care of patients having tuberculosis and for its prevention. Such a program is of first importance. Tuberculosis is the cause of more illness, more deaths, and more inefficiency among our people who are in the productive ages than any other



disease, except syphilis, and it is our definite responsibility to develop and perfect a program, which we can present to the people and the legislators with a view to the reduction of both the financial and human losses from this disease, for which Kentucky is today paying more money than it is for the education of its youth.

We are happy to report the splendid cooperation which our profession and the county clerks of the state have developed in the enforcement of the pre-marital and the pre-natal law. Many cases of syphilis which would have been otherwise unrecognized have been brought under prompt treatment and we have unquestionable evidence that the incidence of syphilis in Kentucky is definitely decreasing.

We note with pride the rapid extension in the past two years of the development of the full-time health departments in the counties of the state. The extension of these important agencies of the profession to the remaining counties of the state is now limited only by the state appropriations for their support.

In preparation for the coming session of the legislature, your Committee urges that you confer with your Senators and Representatives on these important matters before they leave their homes for Frankfort so that they will be informed as to your attitudes and particularly your reasons for such attitudes. In the crowded calendar of our short legislative session, it is difficult to secure that calm and considered planning that is so necessary for movements that pertain to health. They should be informed particularly that the Food, Drug and Cosmetic Act will be opposed by lobbyists employed by beneficiaries of our present antiquated legislation on this subject. Skillful attempts will be made to confuse the legislators and public opinion, and it is essential that we keep the minds of our people and the legislature on the soundness of the program to secure its passage.

Respectfully submitted,

H. H. Hunt

J. B. Lukins

E. B. Bradley

A. T. McCormack

Irvin Abell, Chairman.

I move the adoption of the report, Mr. President.

The motion was seconded by T. A. Frazer, Crittenden, and carried.

JOHN W. SCOTT, Lexington: Mr. President, I move, for two reasons, that if it is in order you call next for the report of the Committee on Medical Economics. It deals with the subject to which Dr. Abell has referred; it is a matter of very great importance to us. Dr. Abell referred to the work of this committee in his report. In addition to that, I think the women who are present here would be particularly interested to hear it, and it would be well to put it on the program while they are still present. In addition to that, I understood it was passed this afternoon, not by reason of any carelessness of the committee, but by reason of the fact that they wished to have a further meeting in order to amplify the report. I move you, sir, that that report now be called.

PRESIDENT GARY: The regulation of the Society, as I understand it, is that any paper that is passed for any reason has to go to the end of the program. However, we have had a motion that this be taken up at this time. Is there a second to that motion?

The motion was seconded.

PRESIDENT GARY: All in favor of taking up the report of the Committee on Medical Economics at this time say "aye"; contrary "no." The "ayes" have it.

At the request of Dr. Simpson we will not call that committee report at the present time, if we have only two or three more short reports, and will go on with the regular program.

SECRETARY McCORMACK: I would ask unanimous consent that the representatives of the Woman's Auxiliary remain to hear this report after they have made their report, because I know it will be very interesting and very important for them to hear, and because we need their support in carrying it out.

PRESIDENT GARY: Next is the report of the Committee on the Woman's Auxiliary, Mrs. J. M. Blades.

MRS. J. M. BLADES, Butler: Mr. President, Members of the House of Delegates of the Kentucky State Medical Association: I bring you greetings from the Auxiliary to your organization. The reports from each county Auxiliary president have been very interesting. Each county Auxiliary has made some outstanding contribution, having done that which was nearest to the hearts of the members of that particular Auxiliary. One has concentrated on working for hospital facilities

for the Negroes of the county; one has furnished over 80 speakers on the subject of tuberculosis and tried to isolate all the tuberculosis patients of the county; one has done a great deal of sewing for the needy; one conducted an interesting public meeting; one did some landscaping; several had very lovely memorial services on Doctor's Day; one held open house at the Doctor's Shop; another observed Jane Todd Crawford Day with a luncheon and a nice contribution, while all have worked to help eliminate disease and suffering, in keeping with the ideals of our husbands' profession.

Our officers and committee chairmen have been busy during the year. Our Jane Todd Crawford Chairman, with the assistance of our State Superintendent of Instruction, Mr. John Brooker, sponsored an essay contest in Kentucky high schools. Our radio chairman delivered three radio addresses, and our public relations chairman sent out important literature.

Practically every Auxiliary has assisted in placing Hygeia in the high schools of its county; all have assisted in the cancer control drive and in the sale of tuberculosis seals. Some have sent packages to the Frontier Nursing Service and to Hazelwood Sanitarium. A few contributions have been sent to the Doctor's Shop in Harrodsburg. Four editions of the Quarterly have been made.

Commendable as all of these accomplishments may seem, we have not reached a very much desired goal. We wonder what great motive or incentive could bind all Kentucky doctors' wives into an organization that would last and hold the interest of all Kentucky doctors. Won't you delegates share this responsibility with us? Won't you consider yourselves hereby appointed as a committee of one to go back to your county and interest at least one doctor's wife in the advantages to the Medical Society of having an active Auxiliary?

We appreciate the kindness and helpfulness of our Advisory Council and the President and President-Elect of the Medical Association. It has been a pleasure to work with all of you. I thank you very kindly. (Applause.)

PRESIDENT GARY: Thank you very much, Mrs. Blades, for your splendid report. Is there any discussion of this report?

SECRETARY McCORMACK: I don't like to discuss every report, but I do want to

discuss this one. I can't help wondering how you can hear these reports year after year from the counties which have not organized Auxiliaries and continue to stay that way. These women in the counties that have organized are very few in the organization but they have done a wonderful amount of work; they have done work in the prevention of tuberculosis and in the prevention of disease generally. In public health education and in public education they have increased confidence in you in the counties where they have Auxiliaries. Without exception, the delegates and the Councilors from the districts that have good organized Auxiliaries have commended them to you, and I want to join the President of the Auxiliary in urging that you go back home and talk to the woman you have a certain amount of influence with—apparently it is very small in many cases—with all the ability that you talked to her with when you persuaded her to make the mistake of her life and marry you, and get her to join this Auxiliary. If she has regard for your profession, if she has respect for you, if she desires to see people healthier and happier and more efficient, she will want to join with the other women of America who have made this great effort in our behalf and are helping to interpret us to a public that wants to know about us.

I wish every one of you could attend one of the meetings of the Auxiliary of the American Medical Association; I wish you could attend the Auxiliary of the Southern Medical Association; I wish you could see the magnificent gathering that takes place at the annual meetings of the Pennsylvania or the New York or the Massachusetts or the Ohio or the Virginia or the South Carolina Medical Societies where more women are present at the meetings than we had men present at the first fifty annual meetings of this Association. And they are doing things! The American Medical Association has approved this organization time after time. They have urged its extension time after time. I want to appeal to you to go back home this time and have it on your conscience to get your women to start with an organization that will join with the other women of the medical profession of America in helping to let light shine where darkness is.

PRESIDENT GARY: Is there further discussion? The report will be received and filed.



Next is the report of the Committee on Medical Preparedness, A. T. McCormack.

SECRETARY MCCORMACK: I have a very brief report to make. There are 104 Kentucky physicians in the Army. Fayette County heads the honor roll of the medical profession in the state, for it has the best organized medical society in Kentucky; 17 per cent of its physicians are in the Army; 7 per cent from Campbell County are in the Army; 3 per cent from Jefferson County, and from Boyd and from Kenton, are in the Army, and from all the others, except the very small counties, the percentage is lower. In a number of the smaller counties of the state there 66 2-3 to 100 per cent of the physicians in the Army because the younger men were in the Reserve Corps.

The Army needs medical officers; it needs them tremendously; it needs them so tremendously that the appeal to the American Medical Association for them did result in the House of Delegates adopting unanimously a resolution asking the President and the Federal Congress to pass such legislation as would enable the Federal Government to call for physicians as they are needed from the places where they can be spared.

I want to appeal to the profession in Kentucky, which now has the largest percentage of its membership in the present armed forces (in addition to the 104 that are in the Army there are 22 in the Navy or Public Health Service; we have the largest proportion of our members in service at present of any state in the Union), to appeal to the younger doctors in the cities of the state, from which they can be spared best, to enroll themselves in the Reserve Corps before the time comes when it becomes necessary for them to be drafted. It ought not to be necessary for Kentucky physicians to be called from their practices in the cities of Kentucky where there is any surplus of them at all. It ought not to be necessary for a Federal law to compel them to report to an Army that is being organized for the preservation of our liberty and for the defense of our common country.

In the surveys asked by the American Medical Association, I am happy to report to you that our survey has been completed a little more than a hundred per cent. We reported not only every physician who is at present practicing in Kentucky—a complete report, but we reported every one

who was listed as practicing who has removed from the state. We have run a little over a hundred per cent in making a report as requested by the American Medical Association.

We need the thoughtful, patriotic cooperation of the younger members of the profession in helping to organize the Army of the United States.

PRESIDENT GARY: You have heard the report. What shall we do with it?

W. B. ATKINSON, Campbellsville: I move its adoption.

The motion was seconded by T. A. Frazer, Crittenden, and carried.

PRESIDENT GARY: Next is the report of the Committee on the McDowell Memorial, Dr. Irvin Abell.

IRVIN ABELL, Louisville: Mr. President and Members of the House of Delegates: Your committee can report with pride the completion of the improvements of the main building in Danville, and that it is attracting from month to month an increasing number of visitors. We ask you again to request the state authorities in charge of this important memorial to remove from it all furnishings which were not associated with either Dr. McDowell or Mrs. Crawford, or which do not belong to the period in which they lived. We do not want to see this beautiful home made the catch-all for even valuable portraits and books of another period in the history of the state.

We also recommend that the Association memorialize the state authorities to complete the improvements of the Doctor's Shop that it may be restored and be as nearly like that of Dr. McDowell as is possible.

One of the members of this committee, Dr. C. C. Howard, of Glasgow, has had painted a beautiful portrait of Mrs. Crawford. We recommend that this portrait and the Davenport portrait of Dr. McDowell, which was acquired last year, be unveiled with suitable ceremonies at the Memorial in Danville.

We desire to express the gratitude of the Association to the Kentucky Federation of Women's Clubs that they have made the planting of the Jane Todd Crawford Trail from Greensburg to Danville one of their projects in the further development of that historic road, in increasing the interest in these two immortals, and which will be a growing tribute to their memory.

Respectfully submitted,  
 C. A. Vance  
 C. C. Howard  
 J. Rice Cowan  
 A. T. McCormack  
 Irvin Abell, Chairman.

I move the adoption of this report.

The motion was seconded by T. A. Frazer, Crittenden.

SECRETARY McCORMACK: I would like to make an announcement that day before yesterday we received a telegram from New York about Dr. Lizar's book. Dr. Lizar, you will recall, was a pupil of Dr. Bell at Edinburgh, and an associate of Dr. McDowell's while he was a student, and when Dr. McDowell sent his copy of the report of the first ovariectomy, on Jane Todd Crawford, to Dr. Bell, Dr. Bell was absent on the Continent and Dr. Lizar received the report. Dr. Lizar subsequently in 1825, wrote a small book "On the Extraction of the Diseased Ovaria," and a copy of that book, so far as we know the only copy in the United States, arrived in New York this week and is now the property of the Kentucky State Medical Association, and I hope to be able to exhibit it to you before the session is over. It is on the way here.

T. A. FRAZER: How far back do you want those books?

SECRETARY McCORMACK: Before 1825.

T. A. FRAZER: I have a book on the practice of medicine, published in 1822. It is not even indexed. I would be glad to contribute that.

PRESIDENT GARY: Is there further discussion on this report? If not, all in favor of its acceptance will say "aye"; contrary "no." The "ayes" have it and it is so ordered.

PRESIDENT GARY: Next, then, is the report of the Committee on Medical Economics, Dr. Virgil Simpson, Louisville, Chairman.

#### REPORT OF COMMITTEE ON MEDICAL ECONOMICS

VIRGIL SIMPSON, Louisville: At the annual meeting last year the committee was instructed to make some study on the problem of hospitalization of the tubercular individuals of this state. Your committee wants to report as a preliminary to its statistical study that it has undertaken to meet with the doctors in the various Councilor Districts of the state and that the Councilors have cooperated with the committee in the main very satisfac-

torily, and we want to thank them for that cooperation.

We want to present chiefly some statistical study of the problem of tuberculosis in this state.

The removal of foci of infection is the essence, indeed the quintessence, of tuberculosis control. From a purely epidemiological point of view, segregation and therapy are the weapons, offensive and defensive, by which the optimum results will be obtained. While institutional care has been over-emphasized, it is a vital factor in the prevention and treatment of tuberculosis; its value increases in inverse ratio to the economic level of the victim.

THE ROLE OF HOSPITALS IN THE MEDICAL CARE OF TUBERCULOSIS. It is a corollary of good medical care that hospitals must be provided where and when needed. But there are other corollaries just as evident.

A hospital is merely a place where the sick may be cared for according to modern standards; it must always be the implement of adequate and competent medical, nursing and other personnel.

A general hospital is a place where medical care is available in a broad, as well as specific sense. The welfare and needs of the patient seeking such hospital care are the ultimate objective. A tuberculosis hospital must meet all of this ultimate objective, and more. It must serve the additional objective of protection of the neighbor through isolation of all open cases. It is in these patients that danger lies because of delayed diagnosis, postponed appeal for medical care, and failure to recognize the early signs of tuberculosis by the laity. A closed lesion constitutes a risk only to the person owning it. Open cases require some form of isolation. Tubercular infection in childhood usually heals; it is not usually transmissible even when active, hence no need for hospitalization.

Educational campaigns and early diagnosis campaigns are worth while, but they are "too little and too late" for the victim who has an open lesion. He is a risk and, if indigent, should be isolated at the state's expense; if solvent, at his own.

The place of the tuberculosis hospital must be estimated from a twofold view. First, does it facilitate the recovery of the patient? Second, to what degree does it help to control the spread of the disease? An adequate answer to these two major premises necessitates a consideration of the economic status of a given tubercular patient. Given financial independence,



such a patient can command satisfactory medical care and a training that helps make him a safe member of society. This may be obtained either in his home or in one of the numerous private institutions of the country. It may be helpful to emphasize the fact that a patient not requiring surgical treatment can be cared for as well at home as in a hospital. Collapse of the diseased lung with air can be done in the home as satisfactorily as in a hospital. Sleeping porches, sun rooms and good food can be made available in the homes of the financially independent group. Here, too, may the lessons be taught that help keep a tubercular individual from being a menace to his neighbor. Education of any nature is not the peculiar property of hospitals.

We have learned in this quarter of a century that there are no panaceas for tuberculosis. In the wake of this reconstruction of our expectations we came to realize that too much had been expected of them in the beginning. As is often true of both the public and the medical profession, the pendulum swung too far, perhaps, in both directions. Certainly we now admit that sanatoriums did not solve the tuberculosis problem, and equally as certain can we be that they have a field of usefulness. What we must now do is evaluate their place and do so as honestly as is humanly possible.

**CLASSIFICATION OF TUBERCULOSIS INSTITUTIONS.** For the purposes of this preliminary study of Kentucky's needs, institutions for the care of the tubercular may be divided into three groups: sanatoriums, tuberculosis departments of other hospitals, and preventoriums. The name "sanatorium" has come to be generally used for institutions that admit only patients with tuberculosis. The term "tuberculosis department" is applicable when a hospital carries other hospital activities but serves tuberculosis patients as well. Preventoriums are children's units which are conducted independently on a permanent basis. It must be understood that a census of preventoriums will not include summer camps for children.

Information obtained from data accumulated from a national survey of facilities for the study, prevention and care of tuberculosis, as well as facilities provided by each state separately studied, is of material value in a survey of Kentucky's needs and facilities. Your committee acknowledges the material assistance it has

had from the surveys of 1935 and 1940, made under direction of the Council on Medical Education and Hospitals of the A. M. A. While it is recognized that certain inherent variations in local needs and conditions obtained, yet certain inherent parallels also obtain, and it is helpful to thus compare experiences with common problems.

In 1940 there were 479 sanatoriums for the care of tuberculosis in the United States; 19 of these were Federal, 72 state, 182 county, 20 city, 16 city and county jointly, and 170 privately operated institutions.

**STATE SANATORIUMS.** There are seven states and the District of Columbia that have made no provisions for the care of their tuberculous citizens. These are Alabama, California, Colorado, Idaho, Illinois, Tennessee, and Washington. Twenty-two states have one each; nine have two each; Pennsylvania, Maine, Michigan and West Virginia have three each; Massachusetts and New York each have four, and Connecticut has five. This latter state has a waiting list of 221, notwithstanding its five state sanatoriums and three private ones with a bed capacity of 1661 and a daily census of 1540 patients. And all of this with a population of 1,717,000.

There are 31 states having private sanatoriums within their borders, California having 24, but having no state-supported hospitals. Colorado has 15 private institutions and not one tax-supported hospital, either county, city or state. The State of New York has four state and 26 county and five city sanatoriums, with 20 private institutions. Ohio has 15 county and one state sanatoriums. The largest group of tubercular patients is cared for in the 182 county sanatoriums with a bed capacity of 22,206 and an average census of 19,481.

There are 31 preventoriums, to which may be added 31 other institutions offering preventorium facilities. The number of preventoriums operated independently is small. Only 29 were listed in 1935; 21 of these are privately owned, six are county and two jointly operated by city and county. Their capacity varies from 10 to 247 beds. The distribution by states reveals that California has eight; there is one in each of 15 states and none in 31, in which group Kentucky is found.

But tuberculosis hospitals do not enjoy the exclusive function of the sanatorium field. General and special hospitals share

it. There are 630 hospitals having departments for the care of tuberculosis in 1940. Of these 630 with tuberculosis departments, 439 were in general hospitals, 92 in nervous and mental institutions, 26 in isolation hospitals, eight in orthopedic hospitals, while the remaining 65 were scattered over homes for the aged, reformatories, prisons, and similar institutions.

While the trend of recent years has been toward reduction rather than increase of this type of service, in keeping with the trend of specialism in general, it is evident that these institutions render an important service in the matter of isolation, segregation, and even treatment. The nature of these tuberculosis departments varies. In 225 hospitals the departments were in separate buildings and 304 occupied separate wings, wards, floors and porches. They also varied in size; 80 were reported as having 100 or more beds, while 484 had less than 25.

In Kentucky there are five sanatoriums dedicated to the care of tuberculosis, with a bed capacity of 1083; seven general hospitals, one county hospital and two mental hospitals have tuberculosis departments with a bed capacity of 325. The total tuberculosis bed capacity of the state for 1940 was 1408. The total admissions to the sanatoriums were 1538 and 331 to the departments of general hospitals, a total of 1869.

A more detailed analysis of the five institutions in Kentucky is desirable. Outwood is located in Christian County and is Federal controlled. It has a bed capacity of 322; no children are admitted. A total of 639 patients were admitted in 1940; its average daily census was 248 with a bed occupancy of 71.3 per cent and a total of 85 deaths. While located in the state it contributes but little to the problem of hospitalization of the indigent tubercular, and hence its bed capacity is not computed in the number of beds available for tuberculosis.

Julius Marks is located at Lexington and is county owned. It has 116 beds, admitted 148 patients, had 13 deaths and a bed occupancy of 80 per cent.

At Covington is located another county sanatorium with 17 beds and 19 patients were admitted during the year studied. The report from the institution is not complete.

Waverly Hills, located in Jefferson

County, is an example of a sanatorium jointly owned by city and county, built by bond issue and tax supported. It has 520 beds, admitted 504 patients, had 112 deaths, and enjoyed a daily average of 490 patients with a bed occupancy of 94.2 per cent. The sanatorium was intended to house the indigent tuberculosis group of Jefferson County and the City of Louisville. This function has not been entirely observed since its doors were opened for patients.

Hazelwood Sanatorium was originally built and operated by the old Louisville Tuberculosis Society and was purchased by the state under an act of the state legislature in 1924. The legislature, however, neglected to provide for the operation of the sanatorium, hence it was conducted as a private institution in that patients admitted had to pay a per diem for their care. In 1928 the General Assembly appropriated \$50,000 for the building of an addition and \$40,000 for repairs and equipment, but the bill was vetoed by the Governor. In 1934 a bill was passed transferring the title of the property to the State Board of Health, with power to mortgage it. A series of court procedures resulted, but in 1935 plans were completed for improvements at a cost of \$320,000, 45 per cent of which is paid by the Federal Government. A capacity of 130 beds will be provided when the building program is completed. Seventy beds were added to Hazelwood through a grant and loan by the PWA, the acceptance of which was authorized by the General Assembly during Governor Laffoon's administration. The Elks' Lodge furnished it. The Governor made available \$50,000 for maintenance during 1938 and 1939. Two hundred and twenty-eight patients were admitted in the year studied; 11 died; its daily census was 91, and the per cent of bed occupancy was only 70 per cent.

The policy of the management as announced is to admit patients that offer a reasonable prospect of an arrest or cure in a few months at most.

A state institution of this sort has a choice of two plans of operation: (a) a selected patient personnel susceptible of rehabilitation in a short period and returning them to their homes to resume their occupations to a degree of former efficiency; (b) to admit patients with advanced active lesions who offer small prospect of arrest and keep them for varying periods terminated by death.



Since the primary purpose of a state sanatorium may be stated as preventive rather than curative, it would seem obvious that there is room for debate as to which plan affords the larger degree of prevention. If all of the active open cases were hospitalized, the danger from contact by members of their families would be materially lessened. Would this result in a larger degree of prevention than to attempt to arrest incipient cases?

Sanatoriums continue to operate on the theory that their function is to cure the patients. This means long occupancy; it means fewer persons get the benefit of the educational features that are undeniably desirable; it means that patients with acute relapses cannot be promptly admitted and gotten into a condition where they may again be cared for in clinics or in their homes; it means that the actual incipient case must wait on a long list until perhaps it becomes advanced or complications obtain that might have been avoided. It is our conviction that our public sanatoriums should be converted into hospitals where the tuberculosis patient may be admitted on short notice, be kept a short period, and returned to the care of the clinic or the private physician. By this method more tuberculosis patients would have the opportunity for training, for detailed clinical study and x-ray examinations. By this method less difficulty would be experienced in persuading the tubercular to enter an institution since he would not be confronted with the example of his predecessors that one must stay in the institution for a long, long time. The rapid turnover would serve to send back into each community enthusiastic evangelists of the really modern campaign for the control of tuberculosis. By this method our tuberculosis institutions become centers of hope and cheer by caring for large numbers who may take short appetizing bites at a confection rather than the refuge of the few who become gourmands filled to satiety and made lazy by indulgence.

**DEATH RATE.** A review of tuberculosis as it affects Kentucky is necessary if rational criteria are to be established for adequate medical care. One of these criteria is the death rate from tuberculosis annually. During 1939 there were reported 1990 deaths to the Bureau of Vital Statistics. Assuming that this represents a fairly accurate report, it would appear

to bulk rather large; 1990 persons ill enough to die of a transmissible disease might mean exposure with death to thousands; and crippled usefulness, economic and physical, to many thousands more.

However, distressing as the picture, broken down by analytic study it loses some of its sinister features. The population of Kentucky for 1939 was 2,839,927; the death rate from all causes was 10.4 while the death rate from tuberculosis was 70.1. The population in 1929 was 2,553,000 and the death rate was 103.9. A drop from 103.9 to 70.1 in ten years is both significant and satisfactory.

Yet another comforting phase of the tuberculosis problem is found in an analysis of the clinical forms in which the disease occurs. The only form of the disease that is a menace to others is a tuberculosis of the respiratory system; tuberculosis of the nervous system, digestive tract, bones and joints, lymphatic system and genito-urinary organs accounted for seven per cent of all deaths from the disease in 1939; in 1929 these forms caused over nine per cent of the deaths.

More than 10 per cent of all the deaths from tuberculosis during the year occurred in the tubercular institutions of the state; therefore, approximately 26 per cent of all deaths from tuberculosis, more than one-fourth, constitute a group that for one reason or another were not a source of risk to the community. Even this group is materially added to by reckoning the private patients who died in their homes but who were taught how to prevent the spread of the disease by their attending physicians. It seems to have become a sort of habit for the public to place a low estimate on the role the family doctor plays in all preventive medicine. Several reasons, including the profession itself, have been factors in moulding the mind of the sick public to entertain the idea that a specialist is possessed of infinite wisdom. A study done in Detroit a while ago determined that the family doctor made 75 per cent of the diagnoses of tuberculosis. The problem of tuberculosis is not limited to the specialist.

The death rate of tuberculosis is not the only standard by which the tuberculosis problem must be measured. One must reckon with the cases which have survived. While all cases of tuberculosis are theoretically reported to the Health Department, there is a rather large group not

so reported. If one estimates that for each tubercular patient that dies during a year there are five others that survive, the rather staggering total of 9,950 cases may be assumed to be living in the state. There is no way of even approximately arriving at a figure that would represent the number of active, open pulmonary cases that are a source of danger to the citizens who may contact them. Since 90 per cent of the deaths were pulmonary cases, one may assume that the same per cent obtains among the living. If there are about 10,000 cases of the disease now alive in the state, there are about 9,000 pulmonary cases living today.

About 1538 patients are admitted annually to the four tuberculosis institutions in the state, and 331 to general hospitals, but there yet remain approximately 7,000 cases of tuberculosis of the pulmonary form which are actually or potentially a source of danger to the community. An undetermined number of these are under the care of physicians, and, at least the major portion are being educated as to how to live and not be a risk to contacts.

A study of the deaths by counties gives some idea of the open cases. Exactly one-half of the total deaths from tuberculosis occur in 22 counties. Approximately one-third of all these deaths occur in six counties, and more than one-fourth in four counties. It is of further interest to note that in these four counties there are tuberculosis hospitals now in operation.

**HOSPITALIZATION PERIOD.** The average length of stay in a tuberculosis hospital in the United States as a whole is about 165 days. This is approximately the figure found by the National Tuberculosis Association and also the Committee on Medical Education and Hospitals of the A. M. A.

There is considerable difference in the stay period in different hospitals dependent upon control. For the Federal hospitals the average stay is 172 days, while 151 days is the average period in private sanatoriums. There is even more variation among the state institutions. In New Hampshire the average is 233 days, in Oregon 204, Florida 197, Alabama 133, and in Kentucky 169 days. Quite definitely shorter is the stay period in tuberculosis departments, being but 101 days as reported by 110 hospitals conducting such departments.

These figures follow the hospitalization curves for other diseases whenever ser-

vice in free hospitals is contrasted with pay institutions.

**WHAT PATIENTS SHOULD BE HOSPITALIZED?** The answer should be sought from a practical standpoint, not a theoretical one. If one adopts the view that tuberculosis is a communicable disease, hence dangerous to public health and therefore should be handled in the same manner as diphtheria and scarlet fever, then everyone having tuberculosis would be put in an institution. Such a policy could not be enforced and one might well say should not be enforced. The types of patients which might properly be hospitalized can be grouped roughly into five groups:

(a) All patients with an advanced stage of the disease whose intelligence and financial status are such as to make it impossible to secure adequate care and insure protection of others.

(b) Patients with a positive sputum who have demonstrated themselves as incorrigible.

(c) Patients with a positive sputum who must live in close contact with children.

(d) All indigent patients with active tuberculosis should be sent to a hospital for a period of training.

(e) Children who have an adult type of pulmonary tuberculosis.

(f) Patients with surgical indications.

**HOSPITAL REQUIREMENTS OF A COMMUNITY BASED ON POPULATION AND OTHER DATA.** Obviously many factors enter into a discussion of an inquiry intended to determine how many and what kind of hospitals a given geographical community should have in order to have available the best medical care. Based on surveys in various states and cities, it appears that a satisfactory standard for general hospital facilities is:

5 beds for every 1,000 inhabitants, for acute transmissible diseases.

5 beds for each 10,000 population for maternity needs; this provides for 30 per cent of all maternity cases.

45 beds for each 10,000 population for general hospitals.

For tuberculosis a different standard must be used, based on the following premises.

In planning for institutional care for the indigent tuberculosis group, it becomes necessary to discuss the number of beds needed. Several factors must be considered in arriving at even an estimated total.



(a) The public appeal in a given community can be determined only approximately before a sanatorium is in operation. Much depends on the activity of case-finding agencies; even the section of a state where a sanatorium is located has a determining influence. It is probable that an institution located in the eastern section of the state to serve a population of 300,000 would find a different attitude of utilization from one located in the mid-zone of the state.

(b) The recorded number of deaths from this form of the disease is one of the measures which may be used. In states where vital statistics are reasonably accurate, two beds for each recorded death is thought to be conservative. In states where the population is sanatorium-conscious and where case-finding activities are maintained, three beds per death might not be excessive. In states where vital statistics are not reliable, a ratio of one bed per thousand population might be reckoned as satisfactory.

(c) Whether the sanatorium is intended to care for every patient having tuberculosis, whether active or latent, whether having an open or closed lesion, or if it be intended to hospitalize only cases that are actively a menace to the other members of their homes or immediate community. If all new cases are to be given a period of institutional care, then more beds, more single rooms and fewer wards would appear desirable. The number of beds is not influenced by the ratio of single-bed rooms to the number of six or eight-bed wards; only the cost of such buildings would be affected by this problem.

(d) Another factor which would have to be considered is the children ill of tuberculosis. It is our belief that children with primary tuberculosis infection do not generally need institutional care. It certainly would not be good care to house such children with adults having open lesions in the same sanatorium. Since few children under twelve years of age have pulmonary tuberculosis, it is thought that where it might be desirable to take such children from home for avoidance of contact with an active case or for treatment it is desirable to place them in a preventorium. Children over twelve with an adult type of infection should be placed in separate wards from adults, as it is undesirable to treat them and adults in the same wards. The National Tuberculosis Association estimates that about five per

cent of the total beds should be set aside for this age group.

Throughout the United States there are found in the sanatoriums 11,647 beds for children, 944 in the tuberculosis departments and 1667 in the preventoriums. Of these 230 sanatoriums, 30 of the hospital departments and 29 preventoriums admit children.

A feature of interest in this connection is that many sanatoriums that admit children have a waiting list of adults. Is this right? It would seem more important in the campaign against tuberculosis that adults with open lesions be removed from the community than to hospitalize non-tuberculous children. It would further seem that isolation facilities in the sanatoriums are essential; of 12,629 children admitted to these institutions, 1191 had adult type tuberculosis, and 3,236 were non-tuberculous. One would not deny that hospital care for the undernourished, underprivileged child might be helpful, but the primary purpose of a tuberculosis hospital is to care for the tuberculous individuals, and viewed from an epidemiological angle it is not consistent to put children free of tuberculosis in a hospital where they must contact patients with open lesions.

(e) The income level below which indigency for the tubercular begins must be fixed before the number of beds can be determined. We have data covering 290 tax-supported and 130 private institutions with a total of 81,583 patients. This is a fair cross-section since it represents 67 per cent of all the admissions in the United States in 1935.

It is interesting to compare the percentages of these three classes of patients in sanatoriums that are tax supported and those that are private. Kentucky has no private sanatoriums, but using those in other states one may get some idea of this phase of the subject. In the tax-supported institutions 2.2 per cent pay full rate, 6.6 per cent pay part of the cost, and 91.2 per cent receive free care. In the private sanatoria 31.8 per cent pay full rate, 24.8 per cent are part-pay patients, and 43.4 per cent pay nothing.

A study of the data for Kentucky indicates that 3.4 per cent are full-pay, 4.0 part pay, and 92.5 per cent are free patients. Such a study does not give a complete view of the financial status of the entire tuberculosis group in the United States, since there is a large per cent who

are never admitted to an institution.

(f) In Kentucky some consideration must be given to the problem of race in bed estimation, since the incidence of the disease is different in the black and in the white race. Consideration must also be given as to whether separate sanatoriums should be located in different sections or whether it would be more economical to house the Negro patients in separate buildings only.

(g) No fixed ratio of beds for the sexes can be set up. It is desirable in the construction of sanatoria that the wards be so arranged that they may be used for either sex as needed.

(h) The percentage of beds occupied daily is of prime importance in evaluating bed needs. Tuberculosis hospitals have a higher percentage of occupancy than general hospitals. The figure for tuberculosis hospitals in the United States for the year 1929 was 82.7 per cent, 85.3 for 1933, 86.2 for 1939, and 85.6 for 1940. By states, New York enjoys 78.3, while Wyoming had only 49.2. Kentucky rang up a fair average with 60.2. Her sanatoriums did better with an average of 85.1 for 1939.

Having these influencing factors in mind and with the experience of other communities at hand, we may set up some approximation of Kentucky's needs for its indigent tuberculosis group.

It is estimated that two beds for each recorded death annually from tuberculosis is conservative. This means in Kentucky, with its 1,990 deaths, there should be available 3,980 beds; there are now 1,408 beds for this service, with a need for 2,572 more. To inaugurate this program, your committee would recommend one bed for each death, a need for 1,990 beds. With 1,083 beds in the tuberculosis sanatoriums and 325 in the departments of general hospitals, there is now a need for 582 more beds. This figure is considered an irreducible minimum.

**COST OF HOSPITALIZATION FOR KENTUCKY'S TUBERCULOSIS INDIGENTS.** An analysis of the cost of tuberculosis sanatoriums in the United States will serve as a background for some intelligent discussion of what it will cost Kentucky. Such cost can be broken down for consideration under three heads:

(a) The cost of construction per bed.

(b) The cost of maintenance per bed annually.

(c) The cost per capita per day.

**CONSTRUCTION COSTS.** There are 479 sanatoriums in the United States with a bed capacity of 78,246. The total valuation of these hospitals from a replacement standpoint was \$241,984,000, an average of \$3,000 per bed. The size of a sanatorium has a very definite influence on the bed cost. The bed cost in a sanatorium of 25 beds or less averages \$1,988, while in one with 50 to 100 beds the average is \$2,745, and in those with 100 or more beds the cost averages \$3,498 per bed. The ownership is also a factor in the bed cost. For example, beds in the Veterans' Hospitals average a cost of \$4,000, while those built by private interests average \$3,070 per bed. One non-federal public sanatorium recently built cost \$13,000 per bed. State and county institutions average a cost of \$3,423. The cost per bed in general hospitals with tuberculosis departments averages \$3,800, while a bed in a preventorium costs \$2,000.

**MAINTENANCE COSTS.** The total cost of tuberculosis hospitalization is estimated at over 75 millions for 1939. This represents about 30 million treatment days at an annual cost per bed of \$900. State, county and city institutions operated at a cost of \$730, while private sanatoriums bore a cost of \$1,000. The Veterans' Bureau tops all annual maintenance cost with \$1,456.

We are concerned at present with construction costs only. If Kentucky is to provide one bed for each death from tuberculosis annually and if there are 1,990 deaths in the state each year, there will be a need for 1,990 beds. One hundred and fifty-four of these must be provided for Negroes. There are now 1,408 beds available for tuberculosis. With a need for 1,990 beds and 1,408 available, 582 more should be provided. Accepting the average cost per bed as \$3,000, the total cost to the state, if she provides for her needs, will be \$1,746,000.

**PER CAPITA COSTS.** The average daily per capita cost in all institutions in the United States is \$2.44, in sanatoriums \$2.37, in tuberculosis departments \$2.95, preventorium \$1.39. The cost in federal hospitals averages \$3.20, the Veterans' Bureau being highest at \$3.98; state and county institutions get by with a cost of \$2.11, while private ones cost \$2.96 per day.



**FACILITIES OF A TUBERCULOSIS HOSPITAL.** Since a house does not make a home, neither does a building make a hospital. This is as true of tuberculosis hospitals as of any other type. The medical care of tuberculosis today must not only provide a place where the patient may be isolated, given good food and a place to rest, but it must provide the facilities for modern care. An x-ray service, yes, but also laboratory service, equipment for mechanical procedures, and a professional personnel adequate in numbers and selected on a basis of training and experience. There should be a ratio of one physician to each 25 patients. Then a nursing staff must be had. The number of graduates may be kept down by conducting a training school which permits of pupil nurses and affiliates from other hospitals. The staff may also be supplemented by practical nurses. The number essential of each group may be estimated as one graduate nurse to each 20 patients, one pupil nurse to each 100 patients, one affiliate to each 50 patients, and one practical nurse to each 25 patients. And the end is not yet. There must be clerks, technicians, dietitians, occupational therapists, cooks, janitors. As long as tuberculosis institutions continue to admit non-tubercular children, educational facilities must be set up equivalent to that of grade schools. Schools are maintained in 159 of the nation's sanatoriums. The reeducation of adult patients to a condition of economic independence is equally as important as the school for children.

**TRAINING OPPORTUNITIES.** The opportunity, even obligation, for physicians in both graduate and undergraduate training, is a function which has great possibilities for the state. Since every general practitioner contacts tuberculosis and early recognition of the disease is so important, state tuberculosis sanatoriums should become centers of training for diagnosis and treatment at least basic in extent. Opportunities for affiliate internships, residencies, seminars, cooperation with county and district medical societies providing for clinico-pathological conferences, offer facilities for raising the level of medical knowledge and training in the state that fires the imagination even in the mere contemplation of possibilities.

The tuberculosis patient must be trained. Many that are discharged will be permanently incapacitated; others, able to be

largely or wholly self-sustaining, must know their limitations; and still others going out with arrested or healed lesions and taking up normal lives, must know how to avoid repetitions of conditions that spelled initial disaster. All of this means a well-balanced sanatorium service, a service in prevention, in therapy, in rehabilitation. Kentucky must not only furnish food, shelter and time for convalescence for its indigent tubercular citizens; it must provide an opportunity for economic as well as physical rehabilitation.

While it is not within the function of this committee to concern itself with nurse training service, it is within its purview to stress the opportunities for both general and specific training afforded by state tuberculosis sanatoriums. Affiliate courses of undergraduate training, courses for graduate instruction for those desiring to specialize in this field, courses for training of practical nurses and nursing aids—these are some of the opportunities which stem from a much-needed state activity and expenditure.

**ADMINISTRATION.** The executive control of tuberculosis institutions must be analyzed independently of ownership control. As might be expected, the larger number of sanatoriums have physicians in charge; there are 314 in this class. Nurses act as superintendents in 86, while 79 have lay administrators. Something like the same proportion is found in hospitals maintaining tuberculosis departments, the actual figures being 344,121 and 165 respectively.

**PRESIDENT GARY:** You have heard the reading of this very extensive report. The committee is to be thanked for getting these statistics together. They have done a lot of hard work.

What is your pleasure as to the disposition of this report?

**A. J. BEAN, Brewers:** I move that it be adopted.

The motion was seconded.

**SECRETARY McCORMACK:** I want to congratulate the House of Delegates and the Kentucky medical profession on the presentation of this study. It is extensive, it is complete, and it is unanswerable, a logical statement of the conditions which exist and which are our job, exactly as it is our job to arouse the state in regard to the condition of our mental institutions. From the beginning of the history of this Association, the members of this profession have made the investigations and

studies that have resulted in the amelioration of conditions that needed to be and could be ameliorated. This is another monumental study and brings up to date what we need to know about this thing.

I think the Committee on Public Relations should be instructed to arrange for a hearing before the Legislative Council with a view to the presentation of this study so that our responsible authorities and our people generally may know the situation that confronts us in this respect.

Tuberculosis presents an entirely different problem from that of the crippled children, from that of old age, from that of insanity. These people can, by isolation, be kept from transmitting the disease to others. Far more than that, the vast majority of them can be restored to economic sufficiency so they can really be of value as citizens of the state. They are not hopeless until they have reached the advanced stage, and if our profession is ready to undertake the job of finding the cases and of hospitalizing them, those that should be hospitalized, and treating those that can be treated at home, (as Dr. Simpson has so well said, a considerable percentage of them can be well treated at home and in general hospitals) if we are willing to undertake the campaign sincerely, all of us participating in it effectively, we can accomplish greater results than have been accomplished in any other state, because we are starting it right.

In order to do that, we are going to have to examine our patients and make the diagnosis early. It is of interest that the Julius Marks Sanatorium, one of the best institutions of its kind anywhere, last year had, of 170 admissions, six incipient cases, or cases early enough to be treated with the maximum cure. Those cases were all found in clinics entirely incidental to the examination that Dr. Dowden spoke of, the health examination in patients who were not suspected of being ill at all. The other cases that were admitted to that institution were all advanced cases. That same situation occurs in sanatoria all over the country. We are going to have the responsibility, if we undertake a program of this sort, of examining our patients regularly and systematically when we go into the families that we treat, of arriving at a diagnosis early enough to restore those cases economically and efficiently in a larger percentage of cases than we have heretofore done. That is part of the prob-

lem. We do not want merely to provide institutions where we are to continue to support over a few more years of life a large number of people who will die anyhow, excepting where those patients, as Dr. Simpson has so well said, are themselves spreading the disease to others. It seems to me that if we can present this problem to the legislature through successive sessions, as we have done with the problem of mental health, as we have done with many of the other problems that have confronted the people of the state, we can make another contribution that will add to the laurels we have already gained.

I want to express my personal gratitude to Dr. Simpson and his committee for this study. It is a monumental study; it is one of the best ones that has been made in the United States, and I have seen them made for many of the states. It is one of the best I have seen and one of the most constructive programs that has been presented to the profession of any state.

I think we can arrange without any difficulty, we have already approved that line of approach in adopting the report of the Committee on Public Relations anyhow—for the presentation by Dr. Simpson of this study of this subject to the Legislative Council, with a view to its consideration by the Legislature. The education of sound public opinion will unquestionably result in an increasingly rapid understanding of the extent of the problem and the possibility of its economic solution.

It is very important in arousing public opinion on a thing of this sort not to get too many small fires started. In several counties in the state, theoretical sanatoria have already been established. It is easy to get somebody to give you \$25,000 or \$30,000 to buy a new house and call it a tuberculosis center. Without adequate medical care constantly it is not a sanatorium at all; it is just a place where you put some people who are supposed to have tuberculosis when most of them haven't it. We have two or three of those in Kentucky now. They are wholly uneconomic, they are unscientific, and they ought not to be considered sanatoria at all and ought not to be countenanced by the profession. If we are going to undertake the solution of a problem of this magnitude, we should go at it with a considered plan and we should establish probably one of these in-



stitutions at one session of the Legislature, another at another, and provide for their problem and adequate maintenance so that we can solve our problem.

At Hazelwood, we have had a serious difficulty. In the building of the additional buildings there, raising it to 130 beds, we have had to use a part of the beds that should be used for tuberculosis to house the personnel. Of course, that reduces the bed occupancy, necessarily, but it is a wholly uneconomic thing because the housing per individual personnel ought to cost very much less than the housing of these cases of tuberculosis. These 130 beds ought all to be open for cases of tuberculosis.

Of course, with only 130 beds in the state outside of Jefferson and Fayette counties, we are confronted with a problem of such magnitude that we find ourselves with 1500 or 2000 cases on the waiting list, and under the law we have to take them in the order of their application, and I know you will realize the dismay with which Dr. Smith, Dr. Turner and Dr. Floyd meet a situation where they have to go down the list of a hundred people before they find one who is able to come to the sanatorium even to occupy a free bed when they have a free bed for occupancy—they are dead or so disabled that they can't even get to the sanatorium. That is uneconomic, it is inhuman, and it is inexcusable in a state like ours that has the people we have in it.

I hope very much that we can approve the report of this committee and present it to the General Assembly, with the hope of receiving from them the sympathetic consideration that its importance demands.

PRESIDENT GARY: Is there further discussion? Dr. Scott, do you have anything to add?

JOHN W. SCOTT, Lexington: I really have nothing to add. I agree with what Dr. McCormack has said. I think it is a splendid report.

Digressing a little in regard to the diagnosis of tuberculosis, of course picking up the cases really is the fundamental thing. I don't think that a man ought to feel chagrined because he runs on a case that is not incipient. I think very often the first manifestations of the disease almost are in what we would have to call advanced forms, paradoxical as that may seem. I think the secret of early diagnosis of tuberculosis is great suspicion of the disease and the invariable use of the x-ray

when that suspicion has been aroused, because there is no way of excluding the possibility of pulmonary tuberculosis without an x-ray examination of the chest; no other examination is adequate. Only those patients in whom you feel that there is not even a suspicion of it should be allowed to go without x-ray examination.

PRESIDENT GARY: Is there further discussion? If not, all those in favor of the approval of this report as read say "aye"; contrary "no." The "ayes" have it and it is so ordered.

The next is the report of the Committee on Hospital Standardization, Dr. Brummett, Chairman.

#### REPORT OF COMMITTEE ON HOSPITAL STANDARDIZATION

U. G. BRUMMETT, Middlesboro: The Committee on Hospital Standardization wishes to submit the following facts:

Hospital standards depend largely upon staff personnel, but nursing service and equipment constitute factors equally important.

When we remember there are more people in Kentucky in the small communities and rural districts than in the large cities, we make no apology for presenting the needs of the small hospital, and those served by it.

The closing of the small training schools by the Nurses' Association has had a disastrous effect upon the standards of the small hospital. It is a noticeable fact that the younger graduate nurses no longer return to the small communities from which they came. In many of the small hospitals, married nurses with families must be depended upon now to carry on the work of nursing. With this group passing, the WPA group, nurses' aids, and the practical nurses will form our first line of nursing service, which tends to still further lower our standard of service in the small hospital.

The grouping of training schools in the larger cities tends to encourage nurses to locate in those centers who would otherwise train in the small hospitals.

Your committee contends that the small training school has produced nurses that more nearly fill the needs of the small hospital and those living in small communities.

Competition has been so keen between hospitals in the small communities that there is a marked tendency to see who can sell the cheapest service. To the average unthinking man, a hospital is a hos-

pital and the difference lies with the physician in charge. He does not realize that usually the cheapest hospital service is also the poorest hospital service. This abnormal strain has had a bad effect both upon the competitive hospitals and upon those served by them.

At the annual meeting of the Kentucky Hospital Association it was evident that all hospitals are having trouble in securing adequate nursing service.

From the tenor of this report you must feel that your committeemen are all Jeremiahs bemoaning the standards of the small hospitals, but your committee believes they have a plan which will bring satisfaction to those in this vicious competition.

First, we recommend that legislation be enacted that will set up a minimum standard of requirements to operate a hospital.

We recommend that a committee under the direction of the State Board of Health or the Kentucky State Medical Association be given power to require all hospitals to meet a minimum standard of requirements.

We recommend that leniency be extended to every hospital, endeavoring to show them that everybody concerned would benefit from higher hospital standards.

We further recommend that an effort be made through the Nurses' Association to reopen many of the smaller training schools, that will give a trained nursing service to replace the practical nursing service now in question.

Upon failure to enlist the sympathy of the Nurses' Association, if such be the case, we would advise that legislation be enacted to set up a nurses' training course under the direction and supervision of the State Board of Health.

Respectfully submitted,

W. L. Tyler

Hal Houston

U. G. Brummett, Chairman.

PRESIDENT GARY: You have heard the reading of this report. Is there any discussion?

CLARK BAILEY, Harlan: I move that the report be adopted.

The motion was seconded by Austin Bloch, Louisville.

JOHN W. SCOTT, Lexington: I think this report should be discussed, because there is a good deal in it that I think is rather difficult of accomplishment. I sympathize fully with the physicians in small hospitals and the difficulty of getting personnel to operate the hospitals, and I feel very

strongly that the doctor in the small place should be able and in position to train individuals, nurses, to take care of his patients according to his standards and according to his needs. Those nurses so trained work with enthusiasm and sympathy. Nurses who come from the larger centers, from the larger cities, high-powered nurses trained in high-class institutions—I mean with high standards, at least—are a little inclined to turn up their noses when they go into the small community to nurse. I sympathize fully with that, but when we talk about reopening training schools in small places, I think we must see the point of view of the nursing fraternity. The nursing fraternity's position is this: They have certain standards for the registered nurse, just as we have standards for the Doctor of Medicine, and if the training schools in this state are of such order that adequate training according to their standards, as judged over the United States—not by the Nursing Association of Kentucky—are not met, if those standards cannot be met by the training schools of the smaller places, as they can't, then the nurses in Kentucky will suffer by comparison, they will not be able to go from institutions in Kentucky to institutions in other states, and all together we will have a low-class nursing personnel. It seems to me that that isn't the way to get at it. The way to get at it is to have a certain class of nurses who are not registered nurses but who are adequate to take care of the needs of these doctors in the smaller institutions and call them by some other name, but we certainly should, I think, have a registered nurse standard in this state which is not falling below that of the other states in this country. I think that is a matter that is to be considered, because I think we do not realize how the nursing associations feel about that. I have talked to some of them. I think some of them are very dumb; I really believe that they are very Bourbonish—they learn nothing and forget nothing; but, after all, there is that fact to remember, that they have their standards which are national and which we have to consider in any program in this state.

W. B. ATKINSON, Campbellsville: This committee has reported a thing that is of interest to the people outside of the larger centers. There is one other problem. There is no such thing as a nursing profession



any more; it has become a nursing union. When anyone will work only eight hours a day, he is not in a profession, he is in a union.

Another problem is this: I will venture to say that right now in St. Joseph's, at Norton and the Baptist and Deaconess Hospitals here in Louisville, there are as many if not more special nurses on duty taking care of patients than there are floor nurses. Now, you have in Louisville and Lexington, with possibly 20 per cent of the population of the state, 90 per cent of the nurses working on eight-hour duty. They are not a profession, because a profession, the medical profession, the legal profession, will take charity cases; nurses won't.

I have had that problem myself in trying to run a small institution. I have heard two superintendents of nurses tell their students: "Don't go out of the large centers. You can't get the proper things out there," and so forth. They like the bright lights. Now we have a problem here that is facing us. Either the problem has to be solved or we are going to close all of the small hospitals. That may be a good thing or it may not be a good thing. It is better, of course, in a case of accident, to have real trained assistants. If you have no real trained assistants in case of accident, half-trained are better than none, and then even somebody just to sit by them until they do get help is better than leaving them alone.

I think none of the small hospitals are claiming that they are diagnostic centers or that they are centers for complete medical care, but they do claim that there is a need that they fulfill. For instance, in a case of ruptured ectopic, a difference in time of three hours is a good deal more important than the man who does the operation, I think—I may be wrong on that.

If there is not some solution of this thing it is going to end up with the hospital caring for the patients and paying the doctors to do the work in the hospital.

AUSTIN BLOCH, Louisville: This committee's very interesting report has dealt with two distinct problems closely related. It seems to me that the committee has chosen rather the safest possible approach to these problems, and particularly the one on the standardization of hospitals, in recommending that the State Board of Health be empowered to pass upon the qualifications of hospitals for permission to carry on. By this I mean that no uni-

form legislative standards could be made for application to hospitals throughout the state.

Dr. Atkinson is entirely correct in his statement that a small hospital, where it is needed, is a very essential public utility, and that nothing should be allowed to prevent the activities of hospitals in small centers. That would be fatal not only to public health and to medical practice, but also to the public welfare in general.

The nursing question seems to be hooked up inseparably with this, but must be handled in an entirely different way, because the nurses are a self-regulating body and the hospitals are, or should be, regulated by the State Board of Health.

In moving for the adoption of this Committee's report, I am actuated by the thought that a large problem has been allowed to go along for years without any expression of opinion by this body. Whether the report should be adopted as it is I don't know, but it seems to me that something should be done very soon in recognition of the problems for both the large and small hospitals, for goodness knows, the small hospital needs good nurses even more than the big one.

SECRETARY McCORMACK: Mr. President, this is one of the most vexing problems, I think, that confronts us. I have had a personal experience that I think qualifies me to make a statement. I have a daughter who is said to be very much like me. I feel very much complimented when that is said, but when I attempt to correct her or to advise her, her reply invariably is that she is so much like her father that I couldn't expect her to do any better than she does.

The nursing profession is ours. We gave it birth. We taught them everything they know. We gave them every idea they have, and when we talk about regulating them, they come back like my daughter does and say, "You have done this exactly and we have copied your laws and we are improving our educational system just as you have improved yours; you have reduced the number of medical schools, and the people in the country have inadequate medical attention, just as they have inadequate nursing attention, and the economic situation is the basis of the whole thing." They put us on the fence in the argument right away.

Dr. Abell covered the situation completely, it seems to me, when he stated

that the standardization of hospitals at different levels should be undertaken. The same regulation should not be made for the conduct of a hospital that has ten beds or twenty beds or forty beds as for a hospital that has 400 beds. It is obviously impossible. I believe the solution is in the provision for the training of attendants at such hospitals, or call them any other thing—I prefer getting a more euphonious title that would sound a little better, if it is possible to do it. Dr. South and I had a hospital that had a training school in it. I think possibly a fourth of the nurses graduated from us had common school after they came to Bowling Green during their nurses' training; some of them took four or five years of training, but all of them not married are now occupying positions as nursing superintendents and have made a great success.

I regret that these hospitals at Paris, Owensboro, Madisonville, or any of these other places, are not able to train people, and not being able to train people, they are not able to take care of the sick people in their hospitals and in their communities. At the same time, it is perfectly obvious, as Dr. Scott has said, that we can't take the nurses that haven't the opportunity of training in what might correspond to the best of our medical schools and subject them to a lower standard and prevent them from receiving reciprocity from other states and lower their standards in order to meet the standards that we need in our rural districts. We need attendants in those hospitals to do what the doctor tells them to do. The doctor sees his patients very much more frequently and he can tell his attendants more frequently what to do, and the care that they get is excellent. There are a great many people in Kentucky who are like pigeons—they don't fly far and you can't take them far. Economically they can't go far, yet they are a self-supporting people with a great deal of pride in their ability to care for themselves, and they want to continue to do that. They don't want to be taken to a state institution or to a public institution where they are not able to provide for themselves. In order to maintain an independent profession in the state it is essential to provide hospital facilities for the practice of medicine today, because there are a considerable number of cases in every community that require certain definite limited hospitalization; there are certain other cases,

somewhere in the neighborhood of ten per cent of all the cases that come to a physician, that require the services of specialists and of specialization in hospitals, but ninety per cent of the patients can be treated at home, in the doctor's office, or in a small hospital quite as effectively as they can any other place, and for the larger part of the people in the community the maintenance of small hospitals in their neighborhood where they are able to get to them, where their families can visit them, is absolutely essential, and it would be a sad day in the economy of our state in the development of its public affairs if we were to banish the small hospitals and destroy them.

In many of our counties, instead of having one doctor to 500 patients, as they have in the mental sanatoria of the state, we have one doctor to 7,500 people, or one doctor even to 10,000 or 12,000 people, and in one county one doctor to every 14,000 people, and we now have in Kentucky a problem that is difficult and intricate.

It seems to me that we can arrive at a solution only after the most careful consideration of all the elements that enter into it. I do not believe that we can reach that solution by lowering the standards of the registration of nurses, but rather by raising the standards of hospital administration and hospital service in the smaller hospitals, and by the training in them of such attendants as are necessary for the care of patients in those institutions.

PRESIDENT GARY: This problem of nursing is not only facing the small hospital; it is facing the doctors in all small communities. It is impossible for the doctors to get nurses from the big city hospitals to come down there and take care of their patients, and that is representative of a great percentage of the people of Kentucky.

What we have always had in the small hospitals may not be the type of training you have in the big hospitals, but it was training adequate to take care of our people, and that training suited us much better than the nurses' training in the larger city hospitals. Since the nursing board has taken this over we are dependent entirely upon improperly trained practical nurses; we have had to take into our hospitals nurses' aides. These aides stay in the hospitals, sometimes, for six months, twelve months, and decide to quit, to get out, and go out as practical nurses.



If we could have some way by which we could get graduate nurses or nurses trained from one to two years, we could utilize those nurses in our practice in these rural communities and be better off than we are at the present time.

The question of the registered nurse should not be overlooked. That only applies to registered nurses. In Tennessee, some of the small hospitals are going back to a three-year course, giving their graduates a diploma which is recognized by the physicians in those communities, and they are employed at home to take care of their patients just as the registered nurse. I believe that something like that should be done in Kentucky. It is not necessary to have a law passed by the Legislature. The nurses are controlled entirely—at least the calling of nurses to attend patients is controlled entirely—by the doctor. If this Association should go on record endorsing the proposition for the small institution to give a course of training for these nurses for their rural communities, not with any idea of sending them into other states, I believe it would help solve the problem for the small hospitals and the doctors in the rural communities.

Is there any further discussion?

U. G. BRUMMETT: Mr. President, I regret very much that the other members of my committee are not present. I want to make myself clear, and I thoroughly appreciate Dr. Scott's viewpoint. It is true that the Nurses' Associations are very jealous of their standards, and they have a right to be. But there is still another right that we are forgetting, and that is the right of the people in the small communities to have nursing service. I would remind you again that the people in the small communities constitute more than a majority of the citizens of the state of Kentucky.

The problem is: What are we going to do about it? I remember a few years ago being over at Vanderbilt at graduation, and they stated frankly that their next year's graduating class would consist entirely of nurses that held degrees, the B. S. or A. B. degree. That is highly commendable, that is a fine thing, but still those people are not coming back to the rural districts to take care of the sick people. What are those people to do? That is the question. What are we to do? No longer will the younger graduates in nursing return to the rural districts after they have graduated from the larger city hospitals.

That has been very evident for the last two or three years.

I am pleading for two things: First of all, that small hospitals may have an opportunity to keep up their standards of service; and, secondly, that the people who are sick in small communities may have the opportunity of securing at least a trained nurse. We will not use the word "registered" nurse. They are entitled to some sort of trained nursing service.

I, together with my associates, operate the Middlesboro Hospital. For a good many years we have run a training school up there and have graduated nurses. Today they are occupying positions in your hospitals in Louisville, they are holding key positions, they are important nurses; they are in the Cincinnati General Hospital, they are in Norton Infirmary, they are scattered clear to the Pacific Coast in reputable, progressive institutions, and they are making good. Now the thing that burns me up is the fact that the Nurses' Association denies me the right to train another nurse in my community to serve my people, and yet they use them and are glad to get them in the larger communities. I maintain there is something radically wrong when a setup like that is permitted and endorsed and supported.

In the small communities we have our emergencies just as you do. We deserve and need excellent nursing service. Just recently, I recall two patients came in with placenta separation, each of them literally bleeding to death. Had we had to send those patients to the cities of Lexington or Louisville or Knoxville, they would have been dead before they reached there. In each case we promptly did a cesarean and promptly transfused them and saved both the cases.

We will soon pass as doctors, and it doesn't matter much to us as doctors, but what about the population, what about the people who constitute more than a majority of the citizens of the State of Kentucky? Are we going to deny them nursing service? Are we going to grant them trained nursing service, I will say, or are we going to say, "You must get along with a practical nurse and do the best you can. It is a serious problem, not only for the small hospital, but from the standpoint of the people who live in the small towns.

PRESIDENT GARY: Is there further discussion? It has been moved and seconded that this report be adopted. All in favor

say "aye"; contrary "no." The "ayes" have it and it is so ordered.

Report of the Delegate to the Convention for the Revision of the U. S. Pharmacopoeia, Dr. Simpson.

VIRGIL SIMPSON, Louisville: Mr. President and Gentlemen: As your representative on the Revision Committee of the U. S. Pharmacopoeia XII, from your delegates to the 12th Decennial Convention, I again appear to make a report on my stewardship.

The work of revision of U. S. P. XI is almost completed and parts of the text are already being finally corrected in proof sheet form. The book will appear early in 1942. More new drugs have been admitted in the forthcoming text than in any previous revision.

The Pharmacopoeia of the future will not be allowed to become outmoded. The text is being continuously revised, therefore the book contents will be brought up to date each year by the addition of supplements, thus keeping the text revised to the present status of knowledge.

The use of the U. S. P. by Government officials as authority for standards for purity and strength is becoming liable to overshadow the fundamental professional reasons for a pharmacopoeia. It must not be forgotten that the intention of the text is to produce a collection of the best known and most used agents, together with preparations for efficient administration and a uniformity of names, strength and purity.

A recent example of the pressure by enforcement officials of the new Food and Drugs Act is found in their insistence that the Pharmacopoeia increase the amount of opium in paregoric so that it could not be purchased by the laity without a physician's prescription. In over a quarter of a century of a fairly active service I have never seen a paregoric addict. The term "official" has always meant Medical acceptance to the profession, but it now is coming to mean legal acceptance.

There has been less objection to deletions with the present Revision than heretofore encountered. This may be due in part to the gradual sloughing off of the doctor of the old school, but more due, I think, to the better dissemination of therapeutic knowledge. Doctors go to more medical meetings and they buy more books and journals. We deleted nearly 100 items from U. S. P. XI. As an example, theobromine sodio-salicylate was deleted.

The sodio-acetate is preferable, being more active on the kidney function, less irritant to the gastric mucosa, and more rapid in action. There is no need for both preparations. Iodoform went out; it should have walked ten years ago.

Attention was called in my report in 1940 to the work being done on ligatures, gauze, adhesive, etc. Adhesive plaster will be made available both in sterilized and unsterilized forms. Surgical gut, silk and synthetic suture material have all been standardized.

Some desirable additions have been made in the matter of such items as pills, tablets, and ampules. These are being added to the text that is forthcoming and will facilitate the prescribing of official agents. Ammonium chloride will be available in capsules; tannic acid will have a solution, a glycerite and an ointment for use. Changes in requirements for packaging of ether will authorize containers as large as 5 liters instead of the  $\frac{1}{4}$  lb. cans hitherto required. Caution as to use not later than six hours after opening is carried. This reduces the cost of ether in hospital use. The small container will still be available for limited use.

We have made some headway with the vitamins since the last report. Ascorbic acid, nicotinic acid, manadione as vitamin K, synthetic vitamin D, riboflavine, rice polishings as tiki tiki, are all now in the official family.

We have proceeded rather slowly with the gonadal hormones. Estrone for oral and injection use has been accepted, so has progesterone and testosterone propionate. A committee of specialists is studying this phase of therapy. The men doing the work are acting as an advisory group. Human serum and human measles serum are among the new members. All together there are over 500 items, some requiring very little new study, but many have much investigation.

The Pharmacopoeia lost its President by the death of Dr. C. W. Edmunds of Ann Arbor, March 1, 1941, of heart disease. He had served on the Revision Committee for 20 years and was elected President of the Pharmacopoeial Convention in May, 1940. He was succeeded by Second Vice-President, Dr. Cary Eggleston, of New York City.

I was asked to make some comment on the following communication from Dr. Smith, of Henderson.



"There is another evil which I feel we should take steps to correct, namely, the unbridled advertising of vitamins and other nostrums by periodicals, pseudo-medical journals, magazines, daily newspapers, and radio. I feel that one way that this could be handled would be for the physicians to be informed of the houses that are accredited and are making bona fide preparations, and to allow the physicians to bring pressure to bear on the druggists, and also to try to enlighten the public, that is, their own patients, that a large majority of these preparations are not manufactured by reputable pharmaceutical companies, that the actual value of the preparation is not known, and that these preparations have not been passed on nor accredited by the medical profession nor the federal government.

"If you will call this to the attention of the Committee on Pharmaceutical Preparations and the concerted war made by the medical profession on this nefarious semi-legalized racket, we can render the laity and also the medical profession a great service."

I might say for your information that the Revision Committee has nothing to do with the marketing; that is beyond our province. The preparations of vitamins that have been admitted to the Pharmacopoeia are being made by whatever firms are licensed to make these preparations, and they may be handled through any agencies that these companies select. As a matter of fact, five and ten-cent stores may handle vitamins. Certainly the chain stores that have to do largely with all sorts of materials that are bought and sold by the public handle vitamins. The Pharmacopoeia has no control over that phase of the utilization of any of its products. It is only through legislation that such control may be secured, either Federal or state, and if you men think that vitamins should be sold only by registered pharmacists, it behooves you to contact your state legislature through your local representatives and your senators and interest them in such legislation.

I think perhaps that answers, as far as the Revision Committee can answer, Dr. Smith's inquiry and suggestions.

PRESIDENT GARY: You have heard this report. Is there any discussion?

JOHN W. SCOTT, Lexington: I move its adoption.

The motion was regularly seconded and carried.

PRESIDENT GARY: We have several reports of committees that were passed this afternoon, and the chairmen of the committees are not present at this time: The report of the Committee on the Council, the report of the Committee on Extension Course, Dr. Keith; the report of the Committee on Public Health, Dr. Smock; the report of the Committee on Medical Education, Dr. Miller; the report of the Heart Committee, Dr. Horine; the report of the Obstetric Advisory Committee, Dr. Higdon.

SECRETARY McCORMACK: Mr. President, I move that we adjourn to meet in this room at two o'clock Thursday afternoon; under revision of the By-Laws we can have that meeting after adjournment of the morning scientific session instead of at seven o'clock in the morning. We will also have the privilege of hearing the scientific program.

The motion was seconded and carried, and the meeting adjourned at 10:30 p. m.

### THIRD SESSION

Thursday Afternoon, October 2, 1941

The final session of the House of Delegates convened at 2:00 p. m., President E. L. Henderson, Louisville, presiding.

PRESIDENT HENDERSON: The House will please come to order.

The first order of business is the roll call, and I will ask the Secretary to call the roll.

The Secretary, A. T. McCormack, called the roll.

SECRETARY McCORMACK: Mr. President, 78 members are present, and it is a quorum.

PRESIDENT HENDERSON: I would like to appoint Drs. Carl Norfleet, Pulaski County, W. L. Cash, Caldwell County, and Ben Reynolds, Nicholas County, as Tellers. Will they please come forward?

The next order of business is the election of a President-Elect. The Chair will entertain nominations for President-Elect.

CLARK BAILEY, Harlan: Mr. President and Members of the House of Delegates: I wish to place in nomination for President a man who during his entire professional career has given much of his time and interest to the medical profession. He has played a great part in developing his own society into one of the best societies in the State of Kentucky. He was honored several years ago through his appointment as Orator in Surgery. He belongs to the American College of Surgeons and is part owner of one of the largest hospitals in Southeastern Kentucky.

This man I am about to nominate is a man who is respected in his particular section of Kentucky for his ability and for his capacity. He has been honored through his appointment as President of the State Board of Health and now is serving his second term in that office. He is in position to mean much during any legislative action in which this society needs all the help it can have.

Because of this man's qualities and his unusual ability, I take great pleasure in nominating Dr. E. M. Howard, of Harlan, for President. (Applause.)

V. A. STILLEY, Benton: It is with a great deal of pleasure that Western Kentucky joins hands with Eastern Kentucky and seconds the nomination of Dr. Howard. It has been my pleasure to know him for a number of years, and I know him to be an outstanding surgeon and an outstanding physician and one who has been a great credit, I think, to the medical profession. I take a great deal of pleasure in seconding the nomination of Dr. E. M. Howard.

JOHN SCOTT, Lexington: I wish to put in nomination a real practitioner of medicine; one whose character and practice and all of his qualifications are of the highest type; one who is a member of a medical family, he has two brothers who are doctors, and who I think in every way would grace the chair of the presidency of this society. He is not, gentlemen, a part or parcel of the State Board of Health. Whatever shortcoming that is, he is guilty of. I wish to put in nomination Dr. Luther Bach of the Campbell-Kenton Medical Society.

ED. NORTHCUTT, Covington: Members of the House of Delegates: I wish to second the nomination of Dr. Luther Bach. He is one of our own men. We admire him, we are proud of him, we are solidly behind him. He is a man of sterling qualities, of excellent ability, and a man whose tongue is not too far from his heart. I wish to second the nomination of Dr. Luther Bach because he is a man we all know; we know he is clean and honest and upright in every way.

MARVIN PRICHARD, Catlettsburg: This seems to be Eastern Kentucky Day. Boyd County would like to place in nomination a candidate for President who has been practicing in Ashland since his discharge from the Army in 1919. He has been in constant attendance at your state meetings and has been very active in state

work. He has served as Councilor of our District for a number of years, and has been very instrumental in organizing medicine in Eastern Kentucky.

It has been, if I remember correctly, which of course I wouldn't, twenty-two years since we have had a President in our immediate vicinity. Boyd County would like to present the name of Dr. Sam Smith of Ashland, as President.

E. C. McGEHEE, Boyd County: I wish to second the nomination of Dr. Smith for the Presidency of the Kentucky State Medical Association. I have known Dr. Smith for approximately 15 years, and I have known of his work in the Kentucky Medical Society, and since Dr. Prichard told you how long it had been since we had a President in the Eastern part of the State, I feel that we are entitled to that much recognition at this time. I therefore second the nomination of Dr. Smith.

J. W. STOVALL, Grayson: I move you that the nominations be closed.

The motion was seconded by J. W. Bailey, Wheelwright, and carried.

PRESIDENT HENDERSON: I will ask the Tellers to spread the ballot.

SECRETARY McCORMACK: Mr. President, the nominees are Dr. E. M. Howard, Dr. Luther Bach, and Dr. S. C. Smith of Ashland.

The ballot was spread.

PRESIDENT HENDERSON: Has everyone voted? If so, I declare the ballot closed.

SECRETARY McCORMACK: Mr. President, 75 votes were cast, of which Dr. Howard received the majority.

PRESIDENT HENDERSON: Dr. E. M. Howard has received 41 votes, which is a majority of the delegates present, and I so declare him elected President-Elect. (Applause.)

I would like to appoint Dr. Bailey and Dr. Stilley to bring Dr. Howard before the House of Delegates.

The next order of business is the election of three Vice-Presidents, one from Eastern Kentucky, one from the Louisville District, and one from Western Kentucky. I shall now entertain nominations for those offices.

SECRETARY McCORMACK: It is important to remember that Delegates are not eligible.

PRESIDENT HENDERSON: We will take first Eastern Kentucky.

SECRETARY McCORMACK: Mr. President, I would like to nominate for Vice-President from Eastern Kentucky, Dr. Luther Bach, and I think I can make a better nomi-



nating speech than was made for him by my distinguished colleague and friend and classmate, Dr. Scott. Dr. Bach is one of the best men in the world. He is as nearly a saint as any human being I have ever known. Instead of saying that he was never connected with the State Board of Health, he was a full-time Health Officer of Breathitt County. That is only one of the many reasons for his distinction. His brother, the Chairman of the Board of Health in Letcher County, is one of the most effective men in the state. Another of his brothers died in Breathitt County and during his entire professional life was a member of and Chairman of the County Board of Health of Breathitt County. An attempt on the part of any man, it doesn't make any difference how high my regard for him is, to create a division in the medical profession of Kentucky between those who are interested in public health is impossible, because there is no distinction in this state between those who are interested in it and those who are not; we are all interested in it. It's ours. This State Board of Health is a creation and creature of this Association, and always has been. Every policy it has ever had has been controlled by it, has been established by it and directed by it. Its members are selected by this organization; they are nominated by it, and I do not propose in this House of Delegates to permit, for one single split second, any attempt to create a cleavage between the specialties in medicine. We are all members of a family, the family of medicine; we are all disciples of Hippocrates, and we are disciples of the Great Physician, and we have a common bond that holds us together indissolubly. We cannot permit at this or any other time, any cleavage on personal or political or prejudicial grounds to keep us from being one family and one body. I know my friend Dr. Scott so well that I know nothing could be further from his heart than to attempt to create such a condition, and I know him so well that I know he would be the last man in the world to have said what he said if he had stopped to think. He is so impetuous, and he is nearly always so correct, that he says what he thinks immediately and then afterwards sometimes thinks about it with some regret, but usually, ninety-nine and a half per cent of the time, he can do it with a great deal of pride because he is one of the outstanding members of our profession, and we all love him and love to honor

him. It is interesting that only a few years ago when he was elected to this position he was elected because Dr. Howard withdrew from his candidacy for the position, and Dr. Howard was very much in favor of Dr. Scott's election. I know Dr. Scott has the same regard and respect for Dr. Howard's professional attainments that Dr. Howard had for his. There are no personalities in this organization and there never can be. Whenever the time comes that there will be, we will have reverted to that condition in Kentucky that is known amongst our politicians, that has never been known in the greatest of professions. (Applause.)

JOHN W. SCOTT, Lexington: Mr. President, may I rise to two points?

PRESIDENT HENDERSON: Gentlemen, Dr. John Scott, of Lexington.

J. W. SCOTT: Taking up the cudgels with my friend Dr. Arthur McCormack is a good deal like fighting a newspaper—you start with a tremendous handicap against you. I rise for two purposes: one, to second the nomination of Dr. Bach; and the other, as a matter of personal privilege to discuss matters which Dr. McCormack has brought out. I think (and I think this is perhaps a good time to say it), that Dr. McCormack has just as sincerely at heart the interests of the Kentucky State Medical Association as I or anybody in this gathering. He and I differ on points of policy, and we differ sharply. Dr. McCormack believes in a centralized government; he believes in managing things the way they ought to be managed, and he is sometimes afraid to let things take their natural course.

SECRETARY McCORMACK: My God! I voted for you!

J. W. SCOTT: I hope he is still glad he did.

SECRETARY McCORMACK: I am.

J. W. SCOTT: I have always said, and I have said it in the Council and I have said it at other times, that I think there is a serious danger in this Association of a bloc. That doesn't mean any discredit to the people who form a bloc. There is a farm bloc in the House of Representatives of the United States; there are blocs for this and blocs for that. We get a large number of health officers who are appointees of the State Board of Health. Some of them are my closest friends that I am perfectly devoted to. I think they are as splendid men as there are in this Association. But that does form a bloc. You

know it as well as I do. Those men, by reason of their association and admiration for their chief, their justified admiration for him, are tremendously influenced by him, and when he wants anything I dare say there are very few health officers in the state who oppose him. I would be the same way if I were in their position. I do think that this is not bringing up any division between the health officers and the men in private practice. They are not specialists in the sense that the nose and throat man and the eye man and the surgeon and the internal medicine men are specialists; they are a particular group that are employed all time under the direction and under the appointment of Dr. Arthur McCormack, and I think anybody is stultifying himself when he says that they are not greatly influenced, not in any low way at all, but are distinctly influenced, by the Secretary of the State Board of Health. If that is raising prejudice, why, I am guilty of it. I don't say that in any offensive way. These fellows are my good friends. I am looking in the faces of some of them who are as loyal friends as I have in the world. It is no disrespect to them. I would be influenced the same way. As somebody once said, if that be treason, make the most of it; if that be division or attempting to draw a line, or anything discreditable, gentlemen, I will have to admit it. In the meantime, I wish to second the nomination of Dr. Luther Bach for Vice-President.

PRESIDENT HENDERSON: At this time I would like to recognize the President-Elect, Dr. Howard. (Applause.)

E. M. HOWARD: Gentlemen, Members of the Kentucky State Medical Association: I want to express my sincere appreciation for your nomination and election of me as President. I don't know why you should do it, but since you have done it I want to say this: I never was a speech-maker, but if there was ever a time in my life that I would like to make a speech it is now.

The State Board of Health, with the cooperation of the Kentucky State Medical Association, has a very big program. They have a lot of big things to do. What I say here probably won't be thought of much, but the shaping of the policies and the carrying out of the activities of you and the State Board of Health in meeting the problems that we have to face in the future will mean a lot to our people in the State of Kentucky.

I will not take up any more of your time, but I will pledge you that we have some problems on hand now that we are going to pursue in every way possible to carry out to a successful conclusion. I vouchsafe that we will have the wholehearted support of all of you.

I want to say further that anybody who opposed me here I consider did not oppose me; you were for somebody else, for the reason that you had, and that is your own good and sufficient reason. Now I want us all to work together. I would like to have the opponents, the men who were nominated as well as myself, on a Program Committee or some position so we could all work together for a bigger, better society. (Applause.)

PRESIDENT HENDERSON: Dr. Luther Bach's name has been placed in nomination for Vice-President from Eastern Kentucky.

SECRETARY McCORMACK: I ask unanimous consent that I be permitted to cast the ballot of the House.

A. M. LYONS: I move that it be done.

The motion was seconded by Clark Bailey, Harlan, and carried unanimously.

SECRETARY McCORMACK: I have pleasure in casting the ballot.

PRESIDENT HENDERSON: The name is Dr. Bach. (Applause.) I will now entertain nominations for Vice-President from Louisville or this District.

B. W. SMOCK, Louisville: Occasionally in some few of our lives there comes an opportunity really to do something that we enjoy and want to do and love to do. That happens to be my feeling today as I stand before you to place in nomination the name of one of Kentucky's outstanding medical men. He is a man qualified in all respects to be the chief executive of any medical organization anywhere. I feel that the Society would be most fortunate in having as Vice-President for the coming year, this man. He will be here in the central part of the state where he can cooperate with your President in the Southeastern portion and with the Vice-Presidents from the East and the West. He is a key man, energetic to the very extreme of his being, sincere and honest to a fault.

It is with a great deal of pleasure and an honor that I present the name of a man who is a master surgeon, a scholar of medicine, and a gentleman par excellence, Dr. M. J. Henry, of Louisville. (Applause.)

GUY AUD, Louisville: I thought I was



going to have the honor and the privilege of nominating Joe Henry, and Wilson Smock talked me out of it, so I didn't get it. Anyway, I am going to have the pleasure of seconding the nomination. It is not necessary for me to say any more than has been said. You know that every word Dr. Smock said is absolutely true and we are all perfectly familiar with the numerous and excellent qualities of this man. We know him to be a finished surgeon, he is a perfect gentleman, and he is a most loyal friend. I take very great pleasure in seconding the nomination of Dr. Joseph Henry. (Applause.)

C. C. TURNER: I move you that nominations now cease and the Secretary be instructed to cast the ballot.

The motion was seconded by Carl Norfleet and carried unanimously.

SECRETARY McCORMACK: I cast the ballot of the House, Mr. President.

PRESIDENT HENDERSON: The ballot is for Dr. Henry. (Applause.)

I would like to ask Dr. Ed. Northcutt to find Dr. Luther Bach and bring him to the platform.

Next is the election of a Vice-President from Western Kentucky. The Chair will entertain nominations.

J. B. LUKINS, Louisville: Is Elizabethtown in Western Kentucky?

PRESIDENT HENDERSON: It is so considered.

J. B. LUKINS: I want to place in nomination Dr. Charles Long of Elizabethtown.

CLARK BAILEY: I second that nomination.

PRESIDENT HENDERSON: Are there other nominations?

A. M. LYONS: I move the nominations close and the Secretary be instructed to cast one ballot.

The motion was regularly seconded and unanimously carried and the Secretary cast the ballot.

PRESIDENT HENDERSON: The ballot is for Dr. Long of Elizabethtown. I would request that Dr. Lukins find Dr. Long and bring him up here.

The next order of business is the election of a Councilor from the Third District. The Chair will entertain nominations for that office.

R. E. HAYES, Glasgow: I wish to nominate Dr. C. C. Turner, of Glasgow.

The nomination was seconded by J. I. Greenwell, New Haven.

PRESIDENT HENDERSON: Dr. C. C. Turner has been nominated for Councilor from

the Third District.

DOUGAL M. DOLLAR, Louisville: I move the nominations be closed, and the Secretary be instructed to cast one ballot.

The motion was seconded by A. M. Lyons and carried unanimously, and the Secretary cast the ballot.

PRESIDENT HENDERSON: The ballot is for Dr. C. C. Turner as Councilor for the Third District.

Next is the election of a Councilor from the Sixth District. The Chair will entertain nominations.

SECRETARY McCORMACK: From time to time the health organization of Kentucky has received a great many compliments. We have been complimented by Presidents and by Governors and Senators and by statesmen as well as by doctors. I think the nicest thing that has ever been said about us is that we can control, through our action, the actions of this House of Delegates. We have four men here in the House and I have had to do with the selection of only one of them. All the rest are elected by their own counties. If those four men can control all the rest of this crowd, knowing the crowd as I do, I think they are pretty smart and I think we deserve a great deal of credit for it.

As long as the statement was made, and made by such a good philosopher, I would like to place in nomination a man for Councilor down here in this District, and I want to use all the influence I have with all of you for it, because he is a very modest man. He never expresses an opinion unless he has one, and whenever he has it he expresses it without fear or favor, and I believe I voice the sentiment of every man in the Sixth District and of every other man who has ever known him or who ever knew his sainted father, when I place in nomination Dr. Burr Atkinson, of Campbellsville, to succeed himself as Councilor for the Sixth District. (Applause.)

The nomination was seconded by A. Clayton McCarty, Louisville.

V. A. STILLEY, Benton: I move the nominations be closed and the Secretary be instructed to cast one ballot.

The motion was seconded by A. M. Lyon and carried unanimously, and the Secretary cast the ballot.

PRESIDENT HENDERSON: The ballot is for Dr. Burr Atkinson to be elected Councilor from the Sixth District.

At this time the Chair will recognize Dr. John Scott, Lexington.

JOHN W. SCOTT, Lexington: On behalf of some of us who are enthusiastically in favor of the candidacy of Dr. Luther Bach for the presidency, I want to move to make the election of Dr. Howard unanimous. This is a little out of turn but the President said he would recognize me for the purpose.

The motion was seconded by D. M. Griffith, Owensboro, and carried by a rising vote.

PRESIDENT HENDERSON: Next is the election of a Councilor from the Eighth District. The Chair will entertain nominations.

CHESTER MORRIS: I nominate Paul Harper.

The nomination was seconded by J. W. Stovall.

W. L. CASH, Caldwell County: I move the nominations close and the Secretary cast the ballot.

The motion was seconded by W. B. Atkinson and carried unanimously, and the Secretary cast the ballot.

PRESIDENT HENDERSON: Dr. Harper is elected.

Next is a Delegate to the American Medical Association for a term of two years.

W. B. ATKINSON: Mr. President, there are two little secrets I want to share with you. There has been some agitation that Louisville has too many of the Delegates. The secret is that we consider Louisville kind of under our wing. Almost all of you doctors who amount to anything were raised in the country and moved to town, slicked your hair down, and all that, so it is really an honor to us to have these Delegates from Louisville.

Then there is another little secret. If anyone whom I was examining as a selective service man would consent to take the job as Delegate to the American Medical Association I would consider that to be prima facie evidence that he was a psychoneurotic, because it is certainly a very thankless and arduous job.

It is my pleasure at this time to place in nomination to succeed himself, Dr. Virgil Simpson, of Louisville.

C. C. TURNER, Glasgow: I wish to place in nomination Dr. John H. Blackburn, of Bowling Green.

VIRGIL KINNAIRD, Lancaster: I should like to have the honor of seconding the nomination of Dr. Virgil Simpson.

W. L. CASH: I would like to have the honor of seconding the nomination of Dr. John H. Blackburn.

PRESIDENT HENDERSON: Are there other nominations? I would entertain a motion that nominations be closed.

A. W. DAVIS, Madisonville: I so move. The motion was seconded by D. M. Griffith, Owensboro, and carried.

PRESIDENT HENDERSON: I will ask the Tellers to spread the ballot.

While we are doing this, I would like to recognize Dr. Henry as Vice-President from the Central District, Louisville.

M. J. HENRY, Louisville: I am not a talker, an orator, or a speech-maker, and while I knew that my name was to be placed in nomination for one of the Vice-Presidents, I felt highly honored, but when I heard the speech of nomination I thought "My, to what extent some people can go!" Dr. Smock hasn't a particularly Irish name, but certainly he has visited the "auld" sod and has taken a dip downward to kiss the "blarney" stone. I appreciate, even though I know it's untrue, what he has said about me, and it will be a great pleasure to me to take part in the activities of this Society. I thank every one of you who voted for me. (Applause.)

PRESIDENT HENDERSON: Next, the Chair will recognize Dr. Long, of Elizabethtown, Vice-President for the Western District.

CHARLES LONG, Elizabethtown: This was a complete surprise to me; in other words, I didn't have this figured out and I don't suppose anybody else did. The fact of it is that I thought I was from Central Kentucky, but if I am West I am willing to go West and do anything that is to be done for the State Board of Health, if necessary, and for the doctors of Kentucky. I stand four-square for the doctors. (Applause.)

PRESIDENT HENDERSON: I would like to announce that immediately following this meeting there will be a meeting of the Council in this room, and I request that all of you be present. You know, we have some bills to pay.

SECRETARY McCORMACK: I move that the bills approved by the Council be ordered paid as follows:



1941			
Sept. 1	—Voucher Check No. 1		\$ 5,000.00
	A. T. McCORMACK, M. D., Louisville		
	To reimbursement for rent on building located at 620 S. Third St., Louisville:		
	Payment on principal of note due 9-1-42	\$ 4,776.49	
	Interest on balance of \$67,051.58 through 9-1-41	223.51	
		<u>\$ 5,000.00</u>	
Sept. 6	—Voucher Check No. 2		100.00
	HARRY H. RAMEY, Attorney, Salyersville		
	To services rendered in case of Ray V. Overstreet, M. D.	100.00	
Sept. 30	—Voucher Check No. 3		140.30
	A. T. McCORMACK, M. D., Louisville		
	To September salary, Secretary	135.00	
	To expense of Trip to Carrollton and return	5.30	
		<u>140.30</u>	
Sept. 30	—Voucher No. 4		90.00
	L. H. SOUTH, M. D., Louisville		
	To September salary, business Manager	90.00	
Sept. 30	—Voucher Check No. 5		30.00
	J. F. BLACKERBY, Louisville		
	To September services rendered Committee on Public Policy	30.00	
Sept. 30	—Voucher Check No. 6		65.00
	ELVA GRANT, Louisville		
	To September salary, Bookkeeper	65.00	
Sept. 30	—Voucher Check No. 7		50.00
	ELIZABETH CONKLING, Louisville		
	To September salary, Stenographer for Medico-Legal Committee	50.00	
Sept. 30	—Voucher Check No. 8		50.00
	JUDGE REX LOGAN, P. M., Bowling Green		
	To Journal postage	50.00	
Sept. 30	—Voucher No. 9		50.00
	HEIMERDINGER & DENNIS, Certified Public Accountants, Louisville		
	To audit of records of A. T. McCormack, M. D., Secretary and A. W. Davis, M. D., Treasurer, of the Kentucky State Medical Association, for the period beginning September 1, 1940 and ending September 1, 1941, and audit of records of Mrs. Luther Bach, Treasurer of the Woman's Auxiliary, and Mrs. Wm. H. Emrich, Business Manager of "The Quarterly" for the period from August 1, 1940 to August 1, 1941	50.00	
Sept. 30	—Voucher Check No. 10		37.27
	STATE DEPARTMENT OF HEALTH, Louisville		
	To reimbursement for July postage	23.19	
	To reimbursement for August postage	14.08	
		<u>37.27</u>	
September 30	—Voucher Check No. 11		37.99
	BUSH-KREBS CO., Louisville		
	To 7 HT. portraits of men	23.80	
	To 1 HT. President of A. M. A.	3.80	
	To 1 HT. portrait	6.47	
	To 1 HT. group of instruments	3.92	
		<u>37.99</u>	
Sept. 30	—Voucher No. 12		10.10
	W. K. STEWART COMPANY, Louisville		
	To 3 mats	.60	
	To 8 frames	9.30	
	To 1 mat	.20	
		<u>10.10</u>	
Sept. 30	—Voucher Check No. 13		110.57
	F. & V. MANUFACTURING CO., East Providence, R. I.		
	To 759 bangles, Louisville 1941	110.05	
	Postage & Insurance	.52	
		<u>110.57</u>	
Sept. 30	—Voucher Check No. 14		75.32
	COURIER-JOURNAL JOB PRINTING CO., Louisville		
	To 5M inserts of photographs printed 1 color—2,500, W. E. Gary; 2,500, E. L. Henderson	74.00	
	Express	1.32	
		<u>75.32</u>	
Sept. 30	—Voucher Check No. 15		5.00
	H. HESSE, Louisville		
	To 1 original photograph, copy of oil painting	5.00	
Sept. 30	—Voucher Check No. 16		1.53
	MEFFERT EQUIPMENT CO., Louisville		
	To 12 pkgs. No. 103 plain sheets	1.80	
	Less 15%	.27	
		<u>1.53</u>	
Sept. 30	—Voucher Check No. 17		2.13
	STATE DEPARTMENT OF HEALTH, Louisville		
	To reimbursement for express	2.13	
Sept. 30	—Voucher Check No. 18		6.25
	STATE DEPARTMENT OF HEALTH, Louisville		
	To reimbursement for long distance calls	6.25	
Sept. 30	—Voucher Check No. 19		29.60
	E. H. ROEDERER, Louisville		
	To 50 Past President badges	5.00	
	To 5 Vice-President badges	.60	
	To 300 Delegate badges	24.00	
		<u>29.60</u>	

Sept. 30—Voucher Check No. 20 .....	715.00	
THE TIMES-JOURNAL PUBLISHING CO., Bowling Green		
To 2,500 September Issue—88 pages .....	\$ 652.00	
To 6 pt. tabular .....	75.00	
To 2 inserts .....	8.00	735.00
Less credit by Ck. No. 176 dated 8-30-41 .....		600.00
		135.00
To 4 pages not charged in August Issue		
(64 pages charged instead of 68) .....		29.00
		164.00
To 2,300 October Issue—64 pages .....		456.00
To 1,000 programs for Annual Meeting .....		95.00
		715.00
Sept. 30—Voucher Check No. 21 .....		37.50
SCHUMAN'S New York, N. Y.		
To book, Observations on Extraction of Diseased Ovaria, Edinburg, 1825, First		
Edition, John Lizars .....		37.50
(McDowell Fund expense)		
Sept. 30—Voucher Check No. 22 .....		84.70
CHARLES A. VANCE, M. D., Lexington		
To expense as Councilor of 10th District .....		84.70

The motion was seconded by E. C. McGehee, Ashland, and carried.

PRESIDENT HENDERSON: We will now have the ballots counted for Delegate to the A. M. A. The ballots were counted.

PRESIDENT HENDERSON: Dr. Simpson having received the majority of the votes cast, I declare him elected Delegate to the American Medical Association for two years.

At this time I would like to recognize Dr. Luther Bach, Vice-President from Eastern Kentucky. (Applause.)

LUTHER BACH: I want to thank my many friends who have been so faithful for the past few days, and I want to express to all of you my great appreciation for this honor that you have bestowed upon me. Thank you very much. (Applause.)

PRESIDENT HENDERSON: The Chair will recognize Dr. C. C. Turner.

C. C. TURNER, Glasgow: I wish to make a motion that Dr. Virgil E. Simpson be elected unanimously as Delegate to the American Medical Association.

The motion was seconded by W. L. Cash and carried unanimously by a rising vote.

PRESIDENT HENDERSON: The next order of business is the selection of a meeting place for next year.

SECRETARY McCORMACK: I move that we accept the invitation of the President of the Murray State Teachers' College to hold the next meeting in Murray, Kentucky. We have had several meetings there; they have been extremely pleasant; the accommodations are fine, and we always have a good time.

W. L. CASH, Caldwell County: I second that motion.

PRESIDENT HENDERSON: You have heard the motion. Are there other nominations for meeting place? The Chair will enter-

tain a motion that the nominations be closed.

A motion was regularly made, seconded, and unanimously carried that the nominations be closed and the Secretary cast the ballot. The ballot was cast.

PRESIDENT HENDERSON: Murray is selected.

Next is the selection of an Orator in Medicine for next year. The Chair will entertain nominations for the place of Orator in Medicine. I recognize Dr. Dollar.

DOUGAL M. DOLLAR, Louisville: Mr. President and Members of the State Medical Association: I would like to place in nomination a man of splendid character, conscientious, a splendid teacher, a fine gentleman, and a scholar. It gives me great pleasure to place in nomination for the position of Orator in Medicine, Dr. Sam Overstreet, of Louisville, than whom there is no finer.

CLARK BAILEY, Harlan: I wish to second the nomination.

PRESIDENT HENDERSON: The nomination of Dr. Sam Overstreet has been made and seconded.

CARL NORFLEET: I move the nominations close and the Secretary be instructed to cast the unanimous ballot.

The motion was seconded by J. W. Stovall, Grayson, and carried unanimously, and the Secretary cast the ballot.

PRESIDENT HENDERSON: The ballot is for Dr. Sam Overstreet, who will be our next Orator in Medicine.

The next order of business is the election of an Orator in Surgery.

SECRETARY McCORMACK: Mr. President, it is the custom to elect one of the Orators from Louisville and the other from the state. The Orator in Surgery should be nominated from the state.

MARVIN PRITCHARD, Catlettsburg: I



would like to place in nomination the name of Dr. Clyde C. Sparks, of Ashland.

J. W. STOVALL, Grayson: I desire to second the nomination.

DOUGAL M. DOLLAR: I move that nominations be closed and the Secretary be instructed to cast the ballot.

The motion was seconded and carried unanimously and the Secretary cast the ballot.

PRESIDENT HENDERSON: Dr. Sparks, of Ashland, has been elected Orator in Surgery.

Dr. Harper, will you come to the platform? Dr. Harper is elected Councilor for the Eighth District to succeed Dr. Bach.

PAUL HARPER: I feel like a babe in the woods, and I am. I am in Kentucky to practice medicine and to what I can to see that all of us as a group do the best that we know for the good of the people, and, incidentally, I am sure that will be for the good of the doctors. I will welcome any criticism and any help that any of you may give me, and I feel free to tell you that I will not object to more than one doing it. I thank you for your vote.

PRESIDENT HENDERSON: The registration for this meeting has reached 1,021. I am very grateful indeed, and I know that this marvelous attendance that we have had at this meeting has been largely due to your efforts, to the efforts of the Delegates, and I might say to the Councilors as well.

I am not sure whether this is the largest registration. Dr. McCormack tells me it is the second largest registration we have ever had. The largest registration that we have ever had at a state meeting was in 1918 when there were a large number of doctors out here at Camp Taylor and down at Camp Knox and elsewhere in the state during the World War. I happened to be at the port of registry of France and was unable to get here.

SECRETARY McCORMACK: There were a few more than 600 outside of the state at that time. That was one of the notable things about the meeting.

I move you, sir, that the thanks of the Association be extended to the Jefferson County Medical Society, our host society, and particularly to the Chairman of the Committee on Arrangements, Dr. Henry, and to Dr. Smock, the Chairman of the En-

tertainment Committee, who gave us such outstanding entertainment; that our gratitude also be extended to Dr. Lahey, an honorary life member of this Association, and to Dr. Curtis and Dr. McMahon, our guests; to the newspapers of Louisville and of the State of Kentucky for their generous space, particularly in regard to our scientific program; to the committees of the Woman's Auxiliary for the beautiful arrangements they made for the entertainment of our women folks; and to the Brown Hotel.

PRESIDENT HENDERSON: I would request our Secretary to include in his motion that the Secretary be instructed to notify Dr. Lahey, Dr. Curtis, and Dr. McMahon, of their election as honorary life members of the Kentucky State Medical Association. Will you accept that, Mr. Secretary?

SECRETARY McCORMACK: Yes sir.

The motion was seconded by W. L. Cash.

SECRETARY McCORMACK: I am sorry to insist on a little formality, but we can't elect honorary life members in a resolution of thanks. They have got to be nominated and elected separately.

PRESIDENT HENDERSON: You are the one who placed the motion.

SECRETARY McCORMACK: I accepted it. Now I withdraw the acceptance.

PRESIDENT HENDERSON: Will the man who seconded the motion withdraw his second?

W. L. CASH: Yes, sir.

PRESIDENT HENDERSON: All those in favor of the motion otherwise make it known by the usual sign. All those opposed. It is so ordered, Mr. Secretary.

SECRETARY McCORMACK: I would like to nominate Dr. Arthur H. Curtis of Chicago for honorary life membership. Dr. McMahon and Dr. Lahey are already elected honorary life members.

The nomination was seconded by J. W. Stovall, and the motion was carried.

PRESIDENT HENDERSON: Is there any other business to come before the House?

SECRETARY McCORMACK: I move we adjourn sine die.

The motion was seconded and carried, and the meeting adjourned at 3:30 p. m., sine die.

A. T. McCORMACK,  
Secretary.



## BOOK REVIEWS

**ESSENTIALS OF ELECTROCARDIOGRAPHY FOR THE STUDENT AND PRACTITIONER OF MEDICINE**—By Richard Ashman, Ph. D., Professor of Physiology, Louisiana State University Medical Center; Director of the Heart Station, Charity Hospital of Louisiana, New Orleans, and Edgar Hull, M. D., Professor of Medicine, Louisiana State University, Medical School, Senior Visiting Physician, Charity Hospital of Louisiana, New Orleans. Second Edition 373 pages and 122 illustrations. The Macmillan Company, New York, 1941. \$5.00.

The many new publications and developments in the field of electrocardiography have made it necessary to rewrite much of this book and to add to the number of pages. It continues to be an adequate treatment of the essentials, both theoretical and practical.

The criticisms of development points of view which would require a more extensive discussion and a much larger volume have been omitted. It is to the credit of the authors that this has not been done. Expert knowledge of the rarer heart disturbances is not essential. They are not only rare but in most cases clinically unimportant.

**INFANTILE PARALYSIS**—By Philip Lewin, M. D., F. A. C. S., Associate Professor of Bone and Joint Surgery, Northwestern University Medical School, Professor of Orthopedic Surgery, Cook County Graduate School of Medicine; Attending Orthopedic Surgeon, Cook County and Michael Reese Hospitals; Consulting Orthopedic Surgeon, Municipal Contagious Disease Hospital, Chicago. Illustrated by Harold Laufman, M. D., 372 pages with 165 illustrations. Philadelphia and London: W. B. Saunders Company, 1941. Price \$6.00.

The busy practitioner desiring fairly comprehensive and complete information concerning poliomyelitis, will find the small textbook by Philip Lewin, M. D., hot off the press of W. B. Saunders Company, Philadelphia, an excellent source of such information.

The chapters in this book are short and concise and yet contain all of the reliable information at present available. They deal with Etiology, Resistance and Immunity, Epidemiology, Predisposing factors, Pathogenesis, Symptomatology, Diagnosis and Treatment of the disease in its acute stages and of the paralytic sequelae. The text describes, in some detail, the method of examination for detecting damaged muscle groups and discusses what should be done in order to protect these damaged muscles so that as much recovery of function as possible will take place.

For the physician who desires to go further

into the study of the disease, at the end of the book is provided an extensive Bibliography. It is an excellent volume to add to the library of any physician.

**HANDBOOK OF COMMUNICABLE DISEASES**—By Franklin H. Top, A. B., M. D., M. P. H., Director, Division of Communicable Diseases and Epidemiology, Herman Kiefer Hospital and Detroit Department of Health; Associate Professor of Preventive Medicine and Public Health, Wayne University, College of Medicine; Special Lecturer in Communicable Diseases and Epidemiology, University of Michigan; Major, Medical Reserve Corps, United States Army and collaborator. With 73 Text Illustration and 10 Color Plates. The C. V. Mosby Company, St. Louis, Mo., publishers, Price \$7.50.

This volume covers, in complete detail, all the infectious diseases, yet it is clinical and practical throughout. It is intended to give the busy physician or health officer the latest information concerning the diagnosis, treatment, mode of transmission and the recognized means of prevention of all significant communicable diseases. The venereal diseases, pneumococcus pneumonia, the rickettsial diseases—such as Rocky Mountain spotted fever and typhus—tularemia, undulant fever, psittacosis, malaria and rabies are covered. So, too, are the ordinary contagious diseases, such as measles, whooping cough, epidemic meningitis, smallpox, poliomyelitis, scarlet fever and diphtheria, which are the infectious diseases ordinarily covered in Handbooks of this type.

For logical discussion the diseases are grouped according to the channel of entrance into the body of causative organisms. They are further sub-grouped according to the kind of organism and according to the mechanism through which the organism gains entrance into the body; that is, whether by contact, through foods, by insect or animal bite or by trauma.

All up-to-date essential information concerning each disease is discussed. This includes symptomatology and pathology, biotherapy and chemotherapy; and, to aid in making management complete, the matter of prevention, both by active or passive immunization and by the use of measures required by regulation or statute, is set forth.

The written text is excellently illustrated by plates in black and white and in colors. The language is excellent and the style is such that it is easily read with the facts brought out clearly.

This is a book that would be used daily by the physician who had it within his reach.



# Kentucky Medical Journal

Published Monthly By  
THE KENTUCKY MEDICAL ASSOCIATION  
Incorporated

Entered as second class matter October 22, 1906, at the Postoffice at Bowling Green, Ky., under act of Congress, March 8, 1879

Subscription Price .....\$5.00  
Edited Under the Supervision of the Council

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NEXT MEETING MURRAY

## COUNTY SOCIETY REPORTS

**Campbell-Kenton:** The regular monthly meeting of the Campbell-Kenton County Medical Society was called to order at St. Elizabeth Hospital at 9:15 P. M., Sept., 1941. The secretary presided in the absence of the president. 30 members were present.

The minutes of the last meeting were read and approved.

The society approved the standing emergency nursing orders of the Metropolitan Health Nursing Service which had been submitted to the Society for its approval.

The application of Dr. John Siehl for membership was unanimously approved. The application of Dr. R. H. Weaver was read and referred to the Board of Censors.

Election of delegates to the State Medical Meeting was next held. The following delegates and alternates were elected:

Drs. Asher Caldwell, J. A. Vesper, W. R. Miner, Ed Norheutt and C. A. Morris. The following alternates were elected: Drs. W. Houston, R. Rust, and R. Biltz.

The scientific paper of the evening was given by Dr. Robert Lyons, Associate Professor of Pediatrics at the University of Cincinnati College of Medicine, who spoke on "Newer Concepts of the Care of the Newborn."

The paper was discussed by Drs. H. Molony, Vandermark, R. Biltz, Zacharias, Jett, and E. Smith, following which the meeting was adjourned.

W. V. PIERCE,  
Secretary

**Campbell-Kenton:** The regular monthly meeting of the Campbell County Medical Society was called to order at Speers Hospital, Dayton, Kentucky, October 2, 1941 at 9:20 P. M., Clay Crawford, President, presided.

The minutes of the last meeting were read and approved.

Communications were read from the State Board of Health, notifying the members of this Society that the Clinical Laboratories of the Fort Thomas Military Post and of Dr. Meyer Jolson of Covington, had been approved for running Kahn tests.

The application of M. V. Caldwell for membership in the Society was read and referred to the Board of Censors.

The application of R. H. Weaver for membership in the Society was unanimously approved by secret ballot.

A report was read by E. B. Mersch concerning the new diagnostic X-ray Clinic to be conducted by the Kenton County Health Department using the State portable X-ray unit. The Society unanimously approved the proposed program.

Frank Mayfield of Cincinnati gave the Scientific paper for the evening: "A report on the work of the Neurosurgical Clinic." Following his paper the meeting adjourned.

W. V. PIERCE,  
Secretary

**Menefee:** The Menefee County Medical Society met in the office of the county health department, there being only one licensed physician in the county, and he was present. The subject of the meeting was reading the Kentucky State Medical Association Journal which was the Annual Number, and was most interesting and enlightening, and after reading this the membership decided to attend in a body.

E. T. RILEY,  
Secretary

**Jefferson:** The 833rd stated meeting of the Jefferson County Medical Society was held Monday evening, October 6, with 46 members present. The President called the meeting to order at 8:05 P. M.

The Secretary read the minutes of the previous meeting and they were approved as read. The President announced that L. Lyne Smith, Meyer Harrison and A. T. Hurst had been appointed the Committee on Nutrition and that J. T. Bate, Ira Kerns and C. J. Armstrong had been appointed the Committee on Industrial Hygiene.

The Secretary announced that applications for membership of George J. Petro, Wilbert M. Twyman and Charles Hugh Maguire had been passed by the Judicial Council.

The President announced that a meeting of Military Surgeons will be held in Louisville the last week of October and this Society will entertain the guests. The Finance Committee for the Kentucky State Medical Association meeting had a surplus from their fund and the President called upon that Committee's Chairman, J. Duffy Hancock for a report.

Dr. Hancock stated that small contributions are still coming in and although all bills were not yet paid he was sure there would be sufficient funds to entertain the Military Surgeons. He made a motion that the Finance Committee be authorized to spend what portion of the balance is necessary to entertain the Military Surgeons. Motion seconded and passed.

J. G. Sherrill called attention to the fact that the candidates for membership had not been acted upon. Motion was then presented, seconded and passed.

Mr. T. J. Nichol, President of the Kentucky State Fire Prevention Association gave a short talk on fire prevention.

A. C. McCarty spoke in behalf of the Community Chest needs and the coming drive. He asked that preliminary consideration be given

concerning one's contribution so that the solicitors could be saved valuable time and the work be expedited.

Virgil E. Simpson of the Committee on Medical Economics read that Committee's proposed amendment to the By-Laws proposing membership in the Credit and Rating Bureau of the accredited members of the Louisville and Jefferson County Dental Society, the Louisville Retail Druggist Association and the private general hospitals of the city. Dr. Simpson made a motion that a copy of this proposed amendment be sent to each member at the first meeting in November and made a special order of business. Motion seconded and carried.

Scientific Program: 8:35 P. M.

Case Report: "Meningococcemia." Meyer M. Harrison, M. D.

"Sequelae of Childbirth." David M. Cox, M. D.

Discussed by Henry Rubel and Rudy Vogt with closing remarks by David Cox.

"Temporomandibular Joint in Relation to the Ear, Nose and Throat." J. Kenneth Hutcherson, M. D.

Discussed by Elam Harris and Louis Block, D. D. S. and M. C. Baker, M. D. with closing remarks by J. Kenneth Hutcherson.

Adjourned: 10:00 P. M.

B. WILSON SMOCK,  
Secretary

**Jefferson:** The 834th stated meeting of the Jefferson County Medical Society was held Monday evening, October 20, with 63 members present. In the absence of M. J. Henry, R. O. Joplin presided. The meeting was called to order at 8:18 p. m.

The Secretary read the minutes of the previous meeting and they were approved as read.

The Secretary read a letter of introduction from Dr. John H. Marshall of Finley Ohio, for Margaret Witzhowski, graduate nurse of the Good Samaritan Hospital of Cincinnati who seeks employment.

The Secretary called attention to the coming meeting of Military Surgeons in Louisville. There will be a smoker on Wednesday evening and a banquet on Thursday. The members of this Society are urged to attend.

Scientific Program: 8:20 p. m.

Case Report: "Pneumonia" R. Alexander Bate, Jr. "Urology in Infancy and Childhood with Case Reports." J. Andrew Bowen.

Discussed by Doctors Chapman Moorman, James W. Bruce and Lee Palmer, with closing remarks by Dr. Bowen.

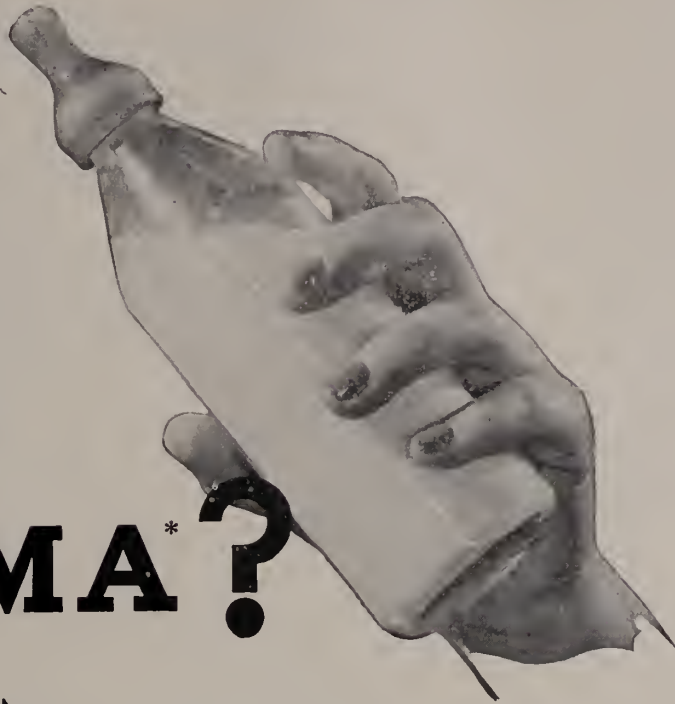
"Common Lesions of the Larynx." J. S. Bumgardner.

Discussed by Doctors Will R. Pryor and B. W. Smock with closing remarks by Dr. Bumgardner. The meeting adjourned, at 9:45 p. m.

W. B. Smock, Secretary.



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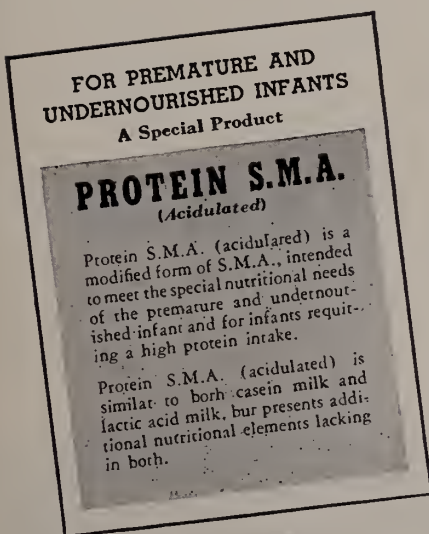
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<sup>1</sup> Jeffcoate, T. N. A.: *Brit. Med. J.* 2:671 (Sept. 30) 1939.

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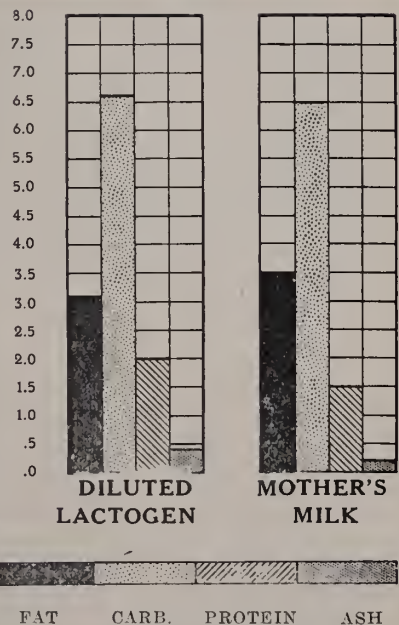
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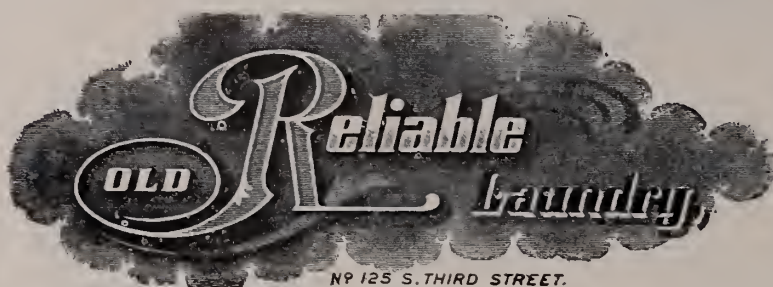
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Clinical Pediatrics, p. 156.*



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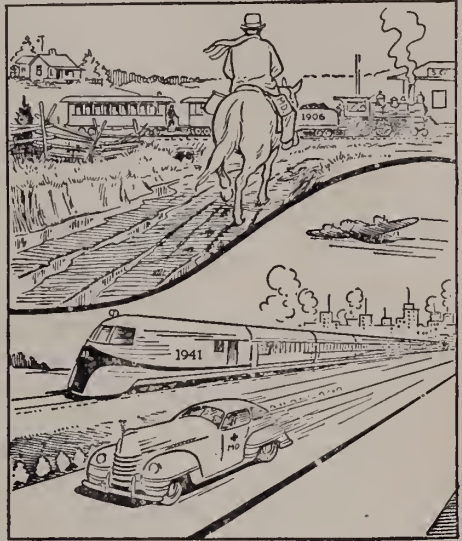
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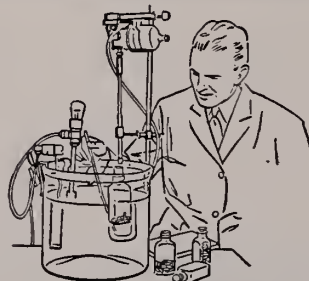
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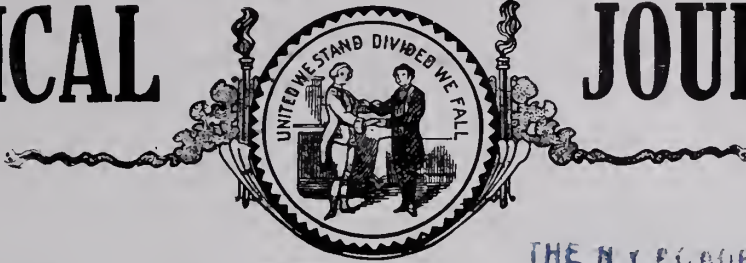
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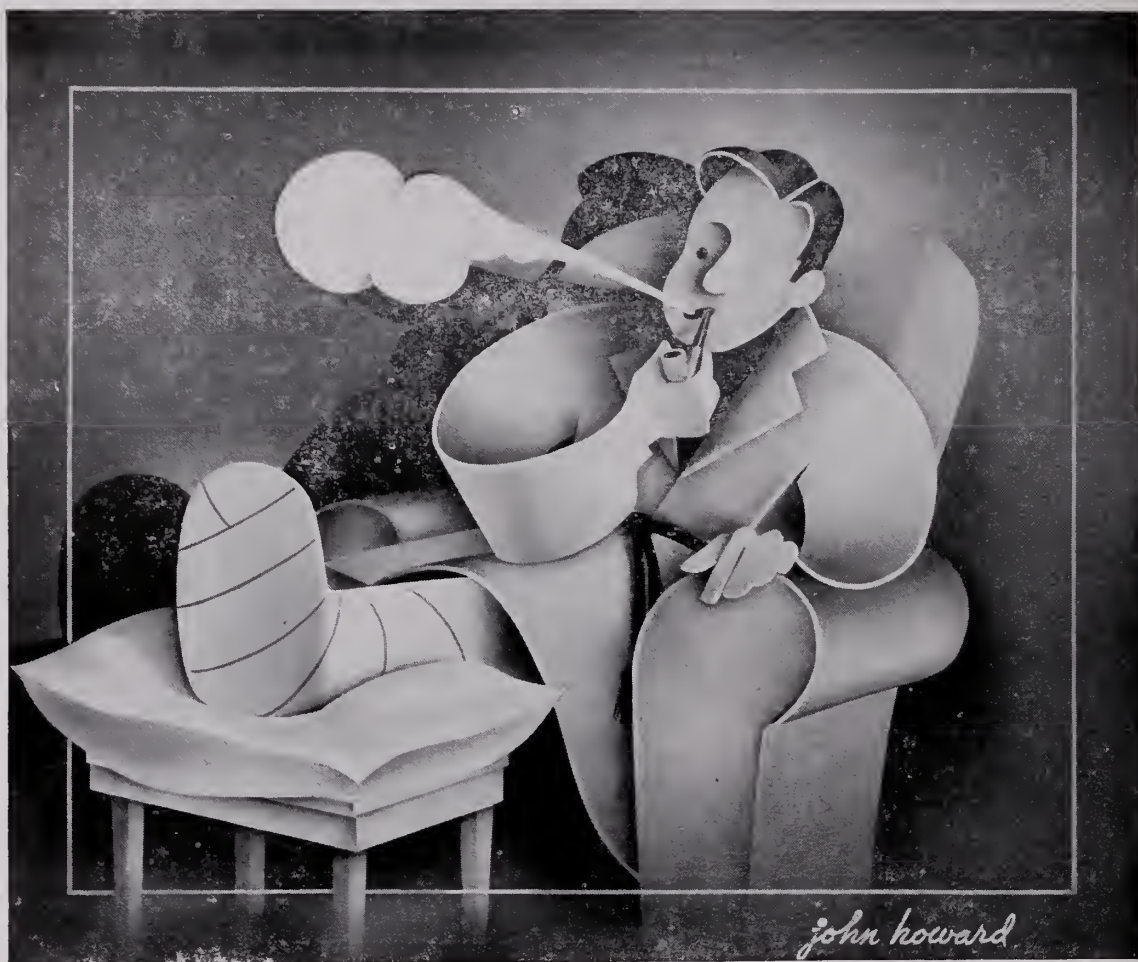
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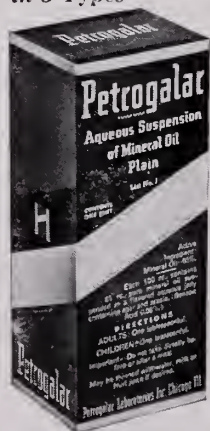
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 JOHN A. GALLOGLY, M. D., Fellow in Surgery

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## HAVE YOU THESE FACTS ON

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Recent U. S. government reports indicate a considerable increase in cigarette smoking. As physicians realize, this is a natural development during times of public tension.

This situation, and the advent of recent and very significant research, have greatly increased the interest of the profession in the subject of cigarette smoking.

Naturally, situations arise in which a physician may find it desirable to modify his patients' smoking hygiene. But in any case, the physician is concerned about the smoke itself, the principal carrier of physiologically reactive substances.

Scientific authorities in general agree that the constituent of cigarette smoke with the greatest physiologic significance is nicotine. Any reduction of this substance in a patient's smoking is considered desirable by most physicians.

When the modification of a patient's smoking is indicated, here are facts which should be of interest to you:

The makers of Camel cigarettes arranged for independent tests on 5 of the largest-selling brands of cigarettes. The rate of burning

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# CONSIDERED CIGARETTE SMOKING?

---

and the nicotine content of the smoke of Camels were compared to the averages of the other brands tested.

The results paralleled the findings of prominent medical—scientific authorities.\* Here is the most important conclusion:

## THE SLOWER-BURNING CIGARETTE PRODUCES LESS NICOTINE IN THE SMOKE

This research also suggests that by advising patients to smoke slower-burning Camels, it is possible to reduce the nicotine content of cigarette smoke *without sacrifice of smoking pleasure*. Thus, the patient's cooperation is assured.

A RECENT ARTICLE by a well-known physician in a leading national medical journal\*\* presents new and important information on this subject, together with other data on the significance of the burning rate of cigarettes. There is a comprehensive bibliography. Let us send you this impressive article for your own inspection. Write to Camel Cigarettes, Medical Relations Division, 1 Pershing Square, New York City.

\*J.A.M.A., Vol. 93, No. 15, p. 1110, Oct. 12, 1929

Bruckner, Die Biochemie des Tabaks, 1936

\*\*The Military Surgeon, Vol. 89, No. 1, p. 7, July, 1941

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Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by Neisseria gonorrhoeae.<sup>1</sup> An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

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## CALENDAR OF COUNTY SOCIETY MEETINGS

COUNTY	SECRETARY	RESIDENCE	DATE
Adair.....	Todd Jefferies .....	Columbia .....	December 3
Allen.....	A. O. Miller.....	Scottsville.....	December 24
Anderson.....	J. B. Lyen.....	Lawrenceburg .....	December 1
Ballard.....	F. H. Russell.....	Wickliffe.....	December 9
Barren.....	R. E. Hayes.....	Glasgow.....	December 17
Bath.....	H. S. Gilmore.....	Owingsville.....	December 8
Bell.....	Edward S. Wilson.....	Pineville .....	December 12
Boone.....	R. E. Ryle .....	Walton .....	December 17
Bourbon.....	B. N. Pittenger.....	Paris .....	December 18
Boyd.....	R. W. Gardner.....	Ashland.....	December 2
Boyle.....	P. O. Sanders.....	Danville.....	December 16
Bracken-Pendleton.....	W. A. McKenney.....	Falmouth .....	December 25
Breathitt.....	M. E. Hoge.....	Jackson .....	December 16
Breckinridge.....	John E. Kincheloe .....	Hardinsburg .....	December 11
Bullitt.....	George B. Hill.....	Mt. Washington .....	
Butler.....	D. G. Miller, Jr.....	Morgantown .....	December 3
Caldwell.....	W. L. Cash.....	Princeton .....	December 2
Calloway.....	J. A. Outland.....	Murray .....	December 4
Campbell-Kenton.....	W. V. Pierce.....	Covington .....	December 4
Carlisle.....	E. E. Smith.....	Bardwell .....	December 2
Carroll.....	H. Carl Boylen.....	Carrollton .....	
Carter.....	Don E. Wilder.....	Grayson .....	December 9
Casey.....	Wm. J. Sweeney .....	Liberty .....	December 25
Christian.....	Geo. E. Pryor.....	Hopkinsville .....	December 16
Clark.....	Robert E. Strode.....	Winchester .....	December 19
Clay.....	L. H. Wagers.....	Manchester .....	December 9
Clinton.....	S. F. Stephenson.....	Albany .....	December 20
Crittenden.....	C. G. Moreland.....	Marion .....	December 8
Cumberland.....	W. Fayette Owsley.....	Burkesville .....	December 3
Daviess.....	T. H. Milton.....	Owensboro .....	December 9 & 23
Elliot.....	W. H. Joyner (Acting).....	Sandy Hook .....	
Estill.....	Virginia Wallace.....	Irvine .....	December 10
Fayette.....	Douglas E. Scott.....	Lexington .....	December 9
Fleming.....	Roy Orsborn.....	Flemingsburg .....	December 10
Floyd.....	Robert Sirkle.....	Prestonsburg .....	December 3
Franklin.....	Thomas P. Leonard.....	Frankfort .....	December 4
Fulton.....	M. W. Haws.....	Fulton .....	December 10
Gallatin.....			December 18
Garrard.....	J. E. Edwards.....	Lancaster .....	December 18
Grant.....			December 17
Graves.....	H. H. Hunt.....	Mayfield .....	December 2
Grayson.....			
Green.....	S. J. Simmons.....	Greensburg .....	December 1
Greenup.....	Paul Holbrook.....	Greenup .....	December 12
Hancock.....	F. M. Griffin.....	Hawesville .....	December 1
Hardin.....	D. E. McClure.....	Elizabethtown .....	December 11
Harlan.....	W. E. Riley.....	Harlan .....	December 20
Harrison.....	W. B. Moore.....	Cynthiana .....	December 1
Hart.....	Maher Speevack.....	Munfordville .....	December 2
Henderson.....	J. Leland Tanner.....	Henderson .....	December 8 & 22
Henry.....	Owen Carroll.....	New Castle .....	December 11
Hickman.....	H. E. Titsworth .....	Clinton .....	December 4
Hopkins.....	Wm. H. Garnier.....	Madisonville .....	December 11
Jackson.....			December 6
Jefferson.....	B. W. Smock.....	Louisville .....	December 1 & 15
Jessamine.....	J. A. VanArsdall.....	Nicholasville.....	December 18
Johnson.....	A. D. Slone.....	Paintsville .....	December 22
Knott.....			
Knox.....	T. R. Davies.....	Barbourville .....	December 18
Larue.....			December 2
Laurel.....	Oscar D. Brock.....	London .....	December 10
Lawrence.....	L. S. Hayes.....	Louisa .....	December 15
Lee.....	A. B. Hoskins.....	Beattyville .....	December 13
Leslie.....	John H. Kooser—(Acting).....	Hyden .....	
Letcher.....	Francis D. Willey.....	Jenkins .....	December 30
Lewis.....			December 15
Lincoln.....	Lewis J. Jones.....	Hustonville .....	December 19
Livingston.....	J. O. Nall.....	Smithland .....	
Logan.....	E. M. Thompson.....	Russellville .....	December 3
Lyon.....	H. H. Woodson.....	Eddyville .....	December 2
McCracken.....	Leon Higdon.....	Paducah .....	December 24
McCreary.....	R. M. Smith.....	Stearns .....	December 1
McLean.....	Allen R. Will.....	Calhoun.....	December 11
Madison.....	Robert L. Rice.....	Richmond.....	December 18
Magoffin.....			
Marion.....	W. E. Oldham.....	Lebanon .....	December 23
Marshall.....	S. L. Henson.....	Benton .....	December 17

COUNTY	SECRETARY	RESIDENCE	DATE
Martin.....			
Mason.....	C. W. Christine.....	Maysville.....	December 10
Meade.....	S. H. Stith.....	Brandenburg.....	December 25
Menifee.....	E. T. Riley.....	Frenchburg.....	
Mercer.....	J. Tom Price.....	Harrodsburg.....	December 9
Metcalfe.....	E. S. Dunham.....	Edmonton.....	December 2
Monroe.....	George E. Bushong.....	Tompkinsville.....	
Montgomery.....	D. H. Bush.....	Mt. Sterling.....	December 9
Morgan.....			
Muhlenberg.....	E. L. Gates.....	Greenville.....	December 9
Nelson.....	R. H. Greenwell.....	Bardstown.....	December 17
Nicholas.....	T. P. Scott.....	Carlisle.....	December 15
Ohio.....	Oscar Allen.....	McHenry.....	December 31
Oldham.....			December 2
Owen.....	K. S. McBee.....	Owenton.....	December 4
Owsley.....	W. H. Gibson.....	Booneville.....	December 1
Perry.....	Lewis C. Coleman.....	Hazard.....	December 8
Pike.....	F. H. Hodges.....	Pikeville.....	December 2
Powell.....	I. W. Johnson.....	Stanton.....	December 1
Pulaski.....	M. C. Spradlin.....	Somerset.....	December 11
Robertson.....			
Rockcastle.....	Lee Chestnut.....	Mt. Vernon.....	December 5
Rowan.....	A. W. Adkins.....	Morehead.....	December 8
Russell.....	J. R. Popplewell.....	Jamestown.....	December 8
Scott.....	A. Y. Covington.....	Georgetown.....	December 4
Shelby.....	C. C. Risk.....	Shelbyville.....	December 18
Simpson.....	L. R. Wilson.....	Franklin.....	December 9
Spencer.....			
Taylor.....	W. B. Atkinson.....	Campbellsville.....	December 4
Todd.....	B. E. Boone, Jr.....	Elkton.....	December 3
Trigg.....	Elias Futrell.....	Cadiz.....	
Trimble.....			
Union.....	Bruce Underwood.....	Morganfield.....	December 2
Warren-Edmonson.....	W. O. Carson.....	Bowling Green.....	December 10
Washington.....	J. H. Hopper.....	Willisburg.....	December 17
Wayne.....	Frank L. Duncan.....	Monticello.....	
Webster.....	C. M. Smith.....	Dixon.....	December 26
Whitley.....	C. A. Moss.....	Williamsburg.....	
Wolfe.....			December 1
Woodford.....	Geo. H. Gregory.....	Versailles.....	December 4

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**HOW SUPPLIED:** Sulfathiazole-Winthrop is supplied in tablets of 0.5 Gm. (7.72 grains); also (primarily for children) in tablets of 0.25 Gm. (3.86 grains).

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SLOWLY BUT SURELY, MEDICAL SCIENCE IS CONQUERING SYPHILIS

Mapharsen offers a record for effectiveness and safety as an antiluetic which has not been surpassed by any other arsenical since the days of Ehrlich. The proof lies in the more than ten million intravenous injections administered over a seven year period.

Directly spirocheticidal without chemical change within the body, Mapharsen exhibits relatively constant parasitocidal value. It makes possible intensive action against the spirochete with comparatively small doses of arsenic. Untoward reactions are fewer and less severe than those attending use of arsphenamine and neoarsphenamine.

Convenience and ease mark the preparation of Mapharsen solutions. Mapharsen dissolves readily in distilled water to form a neutral solution isotonic with the blood—no neutralization required.

Mapharsen (meta-amino-para-hydroxy-phenylarsine oxide hydrochloride) contains 29 per cent arsenic in trivalent form. It does not become more toxic in the ampoule, in the solution, in the body, or when exposed to air.

Supplied in 0.04 Gm. and 0.06 Gm. single-dose ampoules, and in 0.4 Gm. and 0.6 Gm. multiple-dose (10 dose) ampoules.

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## there's a certain attraction

Minerals and vitamins seem to have an attraction for each other too. Vitamin D requirements are dependent upon the presence of calcium and phosphorus.<sup>1</sup> Vitamin D is also more effective, especially in tooth development, when vitamin A and these minerals are present.<sup>2</sup> Vitamin B<sub>1</sub> acts directly on mineral and total metabolism,<sup>3</sup> and vitamin A and iron are related in effects on the hematopoietic system.<sup>4</sup>

# Cocomalt

*Enriched Food Drink*



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**HOBOKEN NEW JERSEY**

1 Elvehjem, C. A. — Nutritional Requirements of Man — Ind. & Eng. Chem., June 1941.

2 McCollum, E. V. — The Newer Knowledge of Nutrition — 5th Ed., 1939, p. 392.

3 McLester, J. S. — Nutrition and Diet in Health & Disease — 3rd Ed., 1939, p. 91.

4 McCollum, E. V. — The Newer Knowledge of Nutrition — 5th Ed., 1939, p. 320.



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### **Crude or Purified**

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2 injectable U.S.P. units per cc.  
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LILLY

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# KENTUCKY MEDICAL JOURNAL

BEING THE JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Published Under the Auspices of the Council

VOL. 39, No. 12

BOWLING GREEN, KY.

DECEMBER, 1941

## THE CLOSING YEAR

The year 1941 has been a prosperous one for the Association and the Journal.

At the annual meeting in Louisville, more doctors were present than at any other meeting in the history of the Association; the scientific exhibits occupied all available space and the technical exhibits surpassed in number those of any previous year.

The expenses of the annual meeting are paid by the technical exhibitors. This includes the splendid transcription of the proceedings of the General Session and discussions of the papers read.

The annual meetings of the Association now offer the equivalent of weeks of post-graduate study in the various branches of medicine and surgery. The practicing physicians are having brought to them now what they formerly had to go to a medical center to obtain. The Journal for the first time since 1932 has made a profit, though small. Its balance is now passed from the "red" to the "black." Its contents represent a cross section of the activities of Kentucky doctors and maintains their usual high standards. The physicians are having delivered to their office without expense to them each month one of the best state medical periodicals in the country. The contents of the Journal during 1941 were: Reading matter 538 pages; advertising, 298 pages; original articles, 102; county societies, 75, and editorials 60.

The advertising pays the expenses of the Journal, and their pages offer all that is new in medicine and its allied branches. These pages should be read diligently and the products advertised should be used whenever practicable. Even though you do not, at the present, need any new equipment, write and tell the advertisers that you have read their advertisement in the Journal. When key requests are sent out, ask for their products and literature.

This issue of the Journal contains a complete Index of all the contents of the 1941 Journals. It is so compiled that there is ready reference to the articles, county so-

cieties and discussions. This number should be kept readily available so each physician can have access to the various scientific contributions of the Kentucky doctors, and can serve as a file for their county society reports.

Trying times are ahead. If we are to meet them successfully, we must remember that the county medical society is the foundation of all medical organization. So long as the local societies are kept active, the present high standards can and will be maintained.

## THINGS YOU CAN TRUST

### CHRISTMAS SEALS



Protect  
Your Home from  
Tuberculosis

This would be a desolate and "jittery" world if we could no longer believe in man and in certain institutions that men have established. If there were no longer lighthouses along dangerous coasts, no other symbols showing that man still protects man, times like these would be terrifying.

But, there are many symbols proving that man looks after man. One of the best known is the double-barred cross, spotlighted by the beam of the lighthouse pictured on this year's Christmas Seal.

Americans have confidence in the double-barred cross, the insignia of the National Tuberculosis Association and its nearly 1,700 affiliated associations. Kentuckians have confidence in the double-barred cross because they know that it is the symbol of the crusade against our great enemy—TUBERCULOSIS. This confidence is deeply rooted in the victories over tuberculosis that have been gained in the United States since 1904, when the National Association was founded, and in Kentucky since the Kentucky Tuberculosis Association was organized.

Time and experience have proved that the menace of tuberculosis can be abolished even though science has not yet found a specific drug for its cure, or any dependable agent for immunization. The death

rate from the disease has been cut three-fourths in the last thirty years. Utter despair has been taken away from the doctor's verdict—"TUBERCULOSIS." We know now that the disease can be cured if found in its early stages and if proper treatment is given.

The social stigma that once hovered over the disease has been completely dispelled. From a hopeless, shameful disease, tuberculosis has become simply an illness which is no respecter of persons. It affects rich and poor alike, has no regard for color or station in life.

However, it can be conquered, not only as an individual handicap, but as a national handicap. When we intelligently apply the knowledge we now have Tuberculosis can, and will, be brought under control.

The associations carried on their lifesaving work through the First World War, through the depression years, and not only will carry on through the years to come, but are now steadily tightening the "reins" on tuberculosis.

A faithful group of Americans have financed the association's work even during the depth of the depression. By buying Christmas Seals, just as they will buy them this year, they have protected those who were unable to protect themselves. This Christmas surely the millions who have gone back to work will again assume their responsibility—a small responsibility: one or two dollars in the fight against the disease that still kills more young people in America than any other cause of death.

The dark gloomy world needs lighthouses to guide men to safety. The Christmas Seal is a lighthouse in a foggy world.

This year let us buy and use Christmas Seals and keep the light shining on the Double-Barred Cross.

#### A TRAINING COURSE IN NURSING SERVICE

One hundred thousand volunteer nurse aides between the ages of eighteen and fifty and with at least a high school education are to be trained during the next twelve months under the auspices of the United States Office of Civilian Defense in collaboration with the American Red Cross and major hospitals of the country, for service in hospitals, clinics, visiting nurse agencies, health departments, school health services and industrial hygiene clinics.

The curriculum has been prepared by the Medical Division of the Office of Civil-

ian Defense, the American Red Cross and the Federal Security Agency. It consists of four weeks' intensive instruction in the local Red Cross chapter house in collaboration with local hospitals and nursing organizations followed by three weeks' supervised practice in hospitals.

Graduates of the course will be enrolled in the Volunteer Nurses Aide Corps of the American Red Cross and will be assigned to agencies through a special placement bureau maintained by the Red Cross.

---

#### SCIENTIFIC EDITORIAL

##### VARICOSE VEINS AND PREGNANCY

During pregnancy the burden of the lower extremities is increased and they deserve special consideration during this period. This begins early in gestation for the increased venous return from the gravid uterus so crowds the iliac veins that there is but little room for blood returning from the legs. As pregnancy advances venous return from the legs is further impeded by pressure of the enlarging uterus itself upon the veins. This interference with venous return increases venous pressure which in association with the physiological increase in blood volume causes swelling and easy fatiguability of the legs. In certain patients the veins themselves become dilated and varicose veins not infrequently first appear, or if already present, become aggravated during pregnancy. This congestion and its sequelae can be relieved by elevation of the limbs above the level of the heart for fifteen minutes several times a day. In patients in whom this form of treatment is not satisfactory, elastic stocking or elastic bandages may be of great benefit.

Patients who already have varicose veins demand particular attention during pregnancy. When seen during the first trimester corrective treatment is indicated. Ligation and injection can be done satisfactorily at this time and will minimize future varices and eliminate the increased tendency to superficial thrombophlebitis which patients with varicose veins exhibit. During the last trimester injection treatment is contra-indicated, although ligation of venous trunks may be done safely. Leg ulcers should be treated by external elastic compression in the form of an Unna's paste boot, Gelocast bandage, or sea sponge and woven elastic bandage.

Woolfolk Barrow.



## SURGERY OF THE SPLEEN

D. P. HALL, M. D., M. S., F. A. C. S.

Louisville

Early in the surgical annals of Kentucky one finds three successful splenectomies, among the first performed in America. Powell's of Newport, Kentucky in 1826, Caldwell's of Russellville in 1816, and Alston's, a surgeon in the Confederate forces, at the battle of Perryville, Kentucky, in 1862.

Many fanciful and mysterious functions have been ascribed to the spleen. The collected literature relative to these functions is enormous. Krumbhaar tritely remarks: "It is unfortunate that it has been so often clouded with immature conclusions from dubious results based on inadequate material."

It may be stated, without reservation, that during fetal life both leucocytes and erythrocytes are formed in the spleen, while the formation of lymphocytes, large mononuclear cells with other types of white cells continue in adult life. There is positive evidence that the spleen's erythrocytic production discontinues at birth.

The defense mechanism of the spleen through lymphocytes and phagocytes in chronic wasting diseases of bacterial origin should be remembered. Phagocytic endothelial cells are agents, both for destruction and disposal of erythrocytes, thrombocytes, and parasitic foreign bodies.

From the work of Barcroft and Binet we have proof positive that the spleen stores large quantities of blood for periods of emergency. The elasticity of the spleen, due to the large amount of smooth muscle in its substance, explains its activity in contraction. Drastic exercise, fear, hemorrhage, injection of adrenalin or pituitrin initiate contraction. The spleen is one of the active blood reservoirs from which reserve blood may be forced into the circulation in time of drastic need.

Many are of the opinion the spleen is involved in some disturbances of lipid metabolism, in that its phagocytes store lipid material not found in the blood, or present in abnormal amounts, such as kersin in Gaucher's disease and cholesterol in Christian's disease.

With the parathyroids, the spleen probably influences calcium metabolism. Twenty per cent of the portal blood entering the

liver comes from the spleen, thus, one must conclude that the increase in this volume in splenomegaly must alter hepatic function.

The surgeon's concern in splenic functions rests on the relation of its removal to well being. We may safely assume that all functions attributed to the spleen may be assumed adequately by other organs, except its capacity as a reservoir. Splenectomy is followed by: (1) A transient secondary anemia, leucocytosis, lymphocytosis and eosinophilia, which is slight, usually disappearing within 12 months; (2) an increased resistance of the red cells to hemolytic agents, formerly altered by a destructive splenic physiology; (3) a decrease in a tendency to jaundice, resulting from the bilirubin formed by the reticulo-endothelial system reaching the liver in a dilute state from the circulation and not in concentration from the portal circulation; (4) an increase in thrombocytes, thus reducing the clotting time.

A. Prigot and L. T. Wright are of the opinion that, "Severe or late effects on the health and well being of the splenectomized person are negligible or absent."

Aspiratory puncture of the spleen as used by some in diagnosis, we believe, should be mentioned, only to be condemned. The procedure is not without danger from hemorrhage or infection and might be described as a dismal swamp procedure.

The grave danger encountered following splenectomy is postoperative thrombosis. In splenic anemia a high platelet count is thought to be a definite contraindication to splenectomy, for fear of splenic, portal and mesenteric venous thrombosis. From experiments in hepaticization after surgical procedures on blood vessels, there seems much evidence to justify the use of heparin as a preventive measure after extirpation of the spleen.

A movable or prolapsed spleen is by no means rare. It may be found in any location in the peritoneal cavity but usually favors the lower quadrant. A bizarre symptomatology is present. Complications, due to moderate torsion, may ensue, such as acute engorgement with subcapsular hemorrhage or necrosis. The diagnosis presents few difficulties, when palpation discloses the shape and notches with an ectopic position. Splenopexy is usually successful except in splenomegaly, when splenectomy must be substituted. The

most serious complication, that of complete torsion with strangulation, demands immediate operative interference.



Fig. 1  
Rupture of Spleen

Rupture of the spleen may be spontaneous or the result of trauma, (Fig. 1), the former usually warrants a grave prognosis, the latter is always a serious abdominal catastrophe. Of the traumatic rupture, fifty per cent succumb within an hour of injury, and the majority in twenty-four hours, unless surgical intervention is instituted. A period of shock, followed by the usual signs of intraperitoneal hemorrhage, is noted. We have not found abdominal rigidity early although tenderness has been quite constant. Contrary to some opinions, we have found Ballance sign to be frequent, depending on dullness in left flank which does not shift as a result of blood coagulation. Again, Kehr's sign, or hyperesthesia over left shoulder tip, has been most valuable, although disregarded by some.

Spontaneous rupture may be a sequel of over-distention imposed on the soft spleen, of acute fevers, septic splenitis, malaria, typhoid fever, and a far larger

number, than one suspects, from subacute bacterial endocarditis. The history of an infection with the sudden appearance of symptoms, indicative of traumatic rupture, leads one to a diagnosis. As a rule, splenomegaly is demonstrable.

Immediate treatment of shock and a prompt splenectomy when shock is controlled should reduce the average mortality of 25 to 35 per cent to 10 per cent.

H. G., aged 32, fell 30 feet striking sand. He showed signs of mild shock from which he recovered in a short time. On his admission to hospital two hours after the accident, definite signs of intraperitoneal hemorrhage were present.

The signs of both Kehr and Ballance were positive with tenderness over the splenic area. The pulse was of poor volume and thready with blood pressure 86-41. Splenectomy was performed with removal of ruptured spleen (Fig. 2) and 2000 cc. of blood from the peritoneal cavity.

B. S. W., aged 31, had been hospitalized four weeks with subacute bacterial endocarditis. He suddenly developed severe pain in left hypochondrium with shock and signs of intraperitoneal hemorrhage. Ballance and Kehr's signs were positive. Blood pressure 88-42; leucocytes, 20,500, with erythrocyte count of 3,000,000 and 50 per cent hemoglobin, pulse 130, thready and

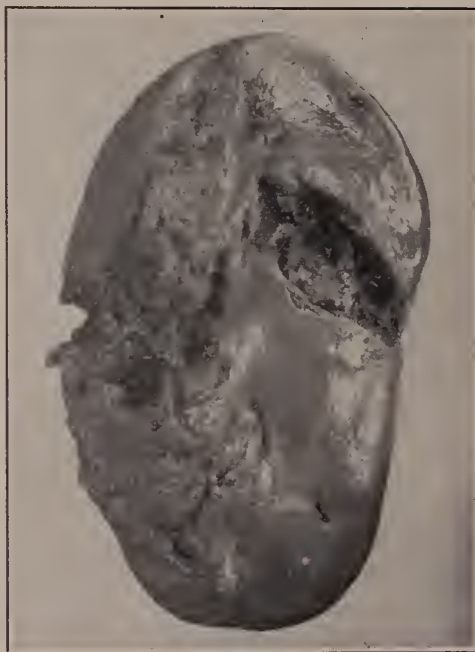


Fig. 2  
Rupture of Spleen into Hilum





Fig. 3

Spontaneous Rupture of Spleen with Infarction

than 50 per cent are recognized, because the severity of the infection from which they result casts a shadow over the complication. Splenectomy is the treatment, provided, general conditions warrant its employment. Sulfanilamide or its allies may be used provided their use does not delay one's operative attack unduly.

of poor volume. At operation a spontaneous rupture of spleen (Fig. 3) with massive intraperitoneal hemorrhage was found.

There is no doubt that many small ruptures of the spleen, not involving the hilus and accompanied by slight hemorrhage, recover without being recognized, depending on two of nature's factors: (1) The great omentum pursuing its well known constabulatory role by plugging the rent; (2) a coagulum efficiently sealing a small disruption.

We are convinced that conservative procedures, such as splenorrhaphy or packing of splenic lacerations, are unsafe, inadvisable, and frequently result in delayed rupture. The mortality must necessarily remain high because of the high incidence of rapid exsanguination and associated injuries.

Abscesses of the spleen (Fig. 4) usually result from : Infected hematomas; septic infarcts occurring in bacterial endocarditis and septicæmias; acute fevers of enteric origin, or by extension from contiguous suppurative lesions. A septic fever with tenderness and pain in splenic area associated with the friction rub of perisplenitis should arouse our curiosity. Not more

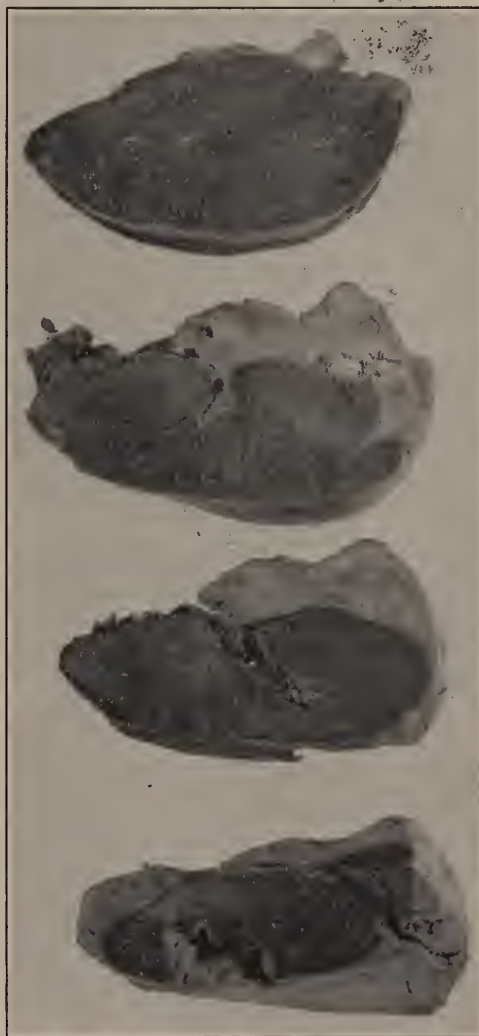


Fig. 4

Multiple Abscesses of Spleen

Since splenic tuberculous infection is hematogenic, the infrequency of primary tuberculosis of the spleen (Fig. 5) is striking, considering its abundant, although peculiar vascular arrangement. The lesion usually presents miliary tubercles on the surface with conglomerate tubercles or caseous masses throughout the organ. A symptomless splenomegaly or a severe sepsis may be present, and at times, Splenic areas are visualized by x-ray. Splenic



Fig. 5  
Tuberculosis of Spleen

nectomy offers the eradication of a large focus of reinfection, and may be indicated in any case of tuberculosis of the spleen, provided this disease is not active elsewhere in the body.

Splenomegaly may be a manifestation of congenital syphilis with enlargement of the liver and secondary anemia; the splenomegaly being only secondary to a spirochete invasion of the liver. At times, difficulty arises in distinguishing this condition from splenic anemia, a positive serologic test is presumptive evidence in favor of hepatosplenomegaly of luetic origin. There are a few luetics who, after thorough antisyphilitic medication, possess a refractory splenomegaly requiring splenic extirpation to remove this focus of spirochete infection.

Malaria remains a causative factor in many splenic enlargements. In chronic malarial splenomegaly, splenectomy may be advisable because of the danger of spon-

taneous rupture, prolapse or torsion, and the spleen remaining a reservoir for reinfection after partial control of the primary disease has been attained.

The manifold difficulties in the diagnosis of splenic anemia (Fig. 6) are well known, probably due to the undetermined etiology and the vagueness with which the term is used to cover a group of diseases, or shall we say, symptom complexes. The name Banti's disease, as used by some, is quite familiar and will stand until a more definite scientific knowledge supplants it with one more specific. The usual characteristics of splenic anemia are: Pallor, weakness, anorexia and abdominal discomfort associated with splenomegaly. Anemia is the rule with a leukopenia. Portal congestion may be marked with varicosities of the coronary veins, accounting for the oft encountered hematemesis. Jaundice and ascites appear, at times, as a terminal manifestation. Splenectomy offers improvement in a great number of early splenic anemias. A large number have a plasma protein deficiency which may be corrected preoperatively by the transfusion of ascitic fluid as used by



Fig. 6  
Spleen of Banti's Disease



Davis. In those moderately advanced, a complimentary ligation of the coronary veins should be considered to reduce the incidence of postoperative hematemesis. The benefit derived from splenic excision may have a physiologic basis by relieving the enormous blood burden imposed on an inadequate liver, occasioned by splenomegaly.

A. B., aged 34, female, was admitted to hospital with recurrent hematemesis. Two months previous to admission she received three blood transfusions for severe gastrointestinal hemorrhage.

The spleen could be palpated with ease, extending into lower left quadrant of the abdomen, and firm in consistency.

Erythrocytes, 2,000,000; hemoglobin, 15 per cent; leucocytes, 5,100. The urine contained bile pigments and urobilin.

At operation a large spleen, consistent with Banti's disease, was removed (Fig. 6) followed by ligation of the coronary vein.

We are of the opinion that of all the theories advanced, Banti's relative to toxicity seems as reasonable as others of equal empirical origin. As to cures, we are aware that a great number are not permanently cured by splenectomy, but a long period of relief ensues, giving ample justification for its use until a definite etiology and specific therapy are at hand.

Thrombocytopenia purpura is a symptom complex with a constitutional tendency to hemorrhage. Clinically, one notes ecchymotic patches under the skin, bleeding from mucous surfaces as from the mouth, or gastro-intestinal tract. The Dall-dorf suction test or tourniquet test are usually positive. A low platelet count,

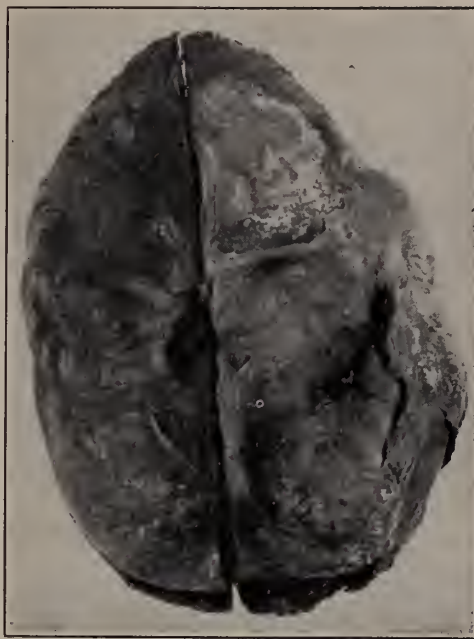


Fig. 8  
Hemangio-endothelioma of Spleen

nonretractile clot with a prolonged bleeding time, is the rule. In many, the Vitamin C concentration is low and should be supplemented with cevitamic acid. Low blood calcium does occur and should receive prompt attention. When conservative measures bring no relief and a normal or increased leucocyte count with a good reticulocyte response to hemorrhage are present with a non-retractile clot and increased bleeding time, splenectomy may be beneficial. When delay is not advisable Doan, Curtis, and Wiseman counsel the use of repeated transfusions to minimize the danger of immediate splenectomy. Failures after removal of the spleen, denoted by recurrent hemorrhages, would seem attributable to accessory splenic tissue.

Congenital spherocytic hemolytic jaundice (Hemolytic icteroanemia) is associated with splenomegaly, erythrocytic fragility, anemia, jaundice, and spherocytosis. The anemia is caused by blood destruction from fragility of the red cells; jaundice occurs from the rapid formation of bile pigment from released hemoglobin; splenomegaly follows increased hemolysis in the spleen causing overactivity. The increased fragility is limited to the spheroidal microcytes. The finding of spherocytes in the blood is now deemed pathognomonic of the disease. As has been aptly stated, these patients seem more jaundiced than



Fig. 7  
Lymphosarcoma of Spleen



Fig. 9

Cavernous Hemangio-endothelioma of the Spleen

sick, an absence of itching is noteworthy. Cholelithiasis is often found in association or as a result of the disease.

Splenectomy is definitely indicated, the symptoms are relieved as by magic, hemolysis is arrested but the spherocytosis and fragility remain. Preoperative transfusions are contraindicated because of hemolysis, but the preoperative injection of adrenalin should be used, resulting in the spleen delivering red blood cells into the circulation, truly an autotransfusion.

Primary tumors of the spleen are not so rare as has been generally supposed. Benign tumors and cysts are found but are far outnumbered by lymphosarcoma (Fig. 7), hemangio-endothelioma (Fig. 8 and 9), and spindle cell sarcoma. Carcinoma is usually secondary. Pain with an increasing mass in left upper abdomen, progressive anemia and emaciation are

suggestive of a malignant lesion. Splenectomy must, of necessity, be early to be beneficial. When splenectomy is contemplated in any lesion involving the spleen, the aid of hematologist, internist, and pathologist, is advisable.

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#### DISCUSSION

J. G. Sherrill, Louisville: The literature upon the spleen, its diseases and the surgery thereof, has increased very materially within the last two decades. Pool and Stillman, in a Surgical Monograph in 1924, made a close study of the literature and found that up to that time very meager positive conclusions had been reached.

Doctor Hall presents an accurate and succinct report of the conclusions of the contributors to the subject since that time. The early observers found the impression existed that the spleen was often enlarged in men who were engaged in foot races and other athletic pursuits requiring prolonged effort. This seemed to make these individuals more successful in these contests.

As stated in the paper of Doctor Hall, many and mysterious functions have been ascribed to this organ. Unfortunately the enormous literature has been clouded by immature conclusions based on inadequate material. With the increased attention to the blood and the related anemias, there has been an increasing close study of the anatomy, physiology and pathology of the spleen and its relation to these conditions, and to the medical and surgical treatment and also of the traumatism and rupture of the organ. The statements made in the paper that in fetal life both leucocytes and erythrocytes are produced seems tenable, and also that lymphocytes, large mononuclear cells and other white cells continue in adult life. It also seems reasonable to accept his statement that the erythrocytic function ceases at birth. In the defense mechanism, the leucocytes and phagocytes seem to destroy and dispose of the red cells and thrombocytes, perhaps destroy parasitic foreign bodies; still it must be



admitted this function fails in some cases. What he states about the reduction of the tendency of jaundice to be diminished because the bilirubin formed by the reticulo-endothelial system reaches the liver in dilute state is probably correct.

The studies of Barcroft and Binet seem to prove the power of the spleen to store large amounts of blood for periods of stress and supports the contention of the older writers upon this point. If the elasticity of smooth muscles in its structure explains this activity in fear, drastic exercise, hemorrhage, injection of adrenalin and pituitrin to initiate contraction for urgent need, a real blood reservoir, as Doctor Hall believes, the idea is new to me—a most valuable contribution. As I have not been impressed with auto-transfusion as recommended by many, Burch and others, in intra-abdominal bleeding, this function in the spleen will and perhaps does, supply a portion of nature's defense mechanism. He has my full agreement upon splenopexy, prolapse, torsion, and subcapsular hemorrhage. My personal experience includes rupture of the splenic artery, a few cases of Banti's disease and traumatic rupture, and until I saw his first case of spontaneous rupture, none had come under my observation. His considerable work and study of this condition has increased my experience. His diagnostic conclusions are accurate and I concur also with what he says of the signs of Ballance and of Kehr. My knowledge of Gaucher's disease does not permit me to depart from his opinion in that connection. In my early work, the pathologist kept me from interfering in a few cases of massive splenomegaly from splenomyelogenous anemia, which may have saved me regret, and on a few occasions my diagnosis of malarial enlargement resulted in improvement under malarial treatment without surgical intervention.

Dr. Hall has had very satisfactory results in his operative methods and in the correctness of his diagnostic acumen.

An indignant Bostonian once rushed to Dr. Everett's house. One of the local papers had published an article severely criticizing this man. Should he demand a public apology or file suit for damages?

Dr. Everett listened quietly then interrupted. "What should you do? My dear sir, do nothing. Half the people who read that paper never saw that article. Half of those who did see it failed to read it. Half of those who read it did not understand it. Half of those who did understand it did not believe it. Half of those who believed it were of no consequence anyway."

## VALUE OF GASTRIC ANALYSIS

FRANK M. STITES, M. D.

Louisville

Since Kussmaul first discovered that the stomach contents could be removed by means of a soft rubber tube, the analysis of the contents has played an important part in the study of diseases of the stomach. The value of this diagnostic step has been and is still variously discussed as to its merit in evaluating the function of secretion and mobility.

There have been numerous methods advocated, many only slight variations from the better known and established procedures, but we hope in this paper to present both views and build up a picture as it exists today.

The first studies were those done after a single aspiration with the old, larger tube which was always unsatisfactory. But in 1914 Reyfuss in Chicago devised the smaller tube which has been less disagreeable to patients and of more value to the physician. It permitted the fractional removal of portions of the contents at stated intervals and this study has shown the complete fallacy of the older reports because of the variations during interval studies. It not only showed this objection but makes us less satisfied with even present day methods and adds incentive for a more satisfactory method of study. However it has also created enough dissatisfaction in certain minds to cause some to discard gastric analysis which we consider very important.

Gastric analysis is only one step in the proper study of patients with digestive disturbances and in those patients with certain systemic diseases which either present gastric symptoms or have known gastric pictures which either complete or materially aid in the diagnoses of the disease.

This criticism could be brought forward for many laboratory methods such as electrocardiography, for in using this instrument one soon learns many things which later can be recognized by physical methods, yet nothing has advanced cardiology as a specialty as has the electrocardiograph and each year sees its use increase.

As we attempt to do diagnostic work and particularly interested in gastroenterology

Read before the Kentucky State Medical Association, Louisville, September 29, 30, October 1, 2, 1941.

we feel that gastric analysis is one procedure that adds more to a proper course of study in the case than any other. If we were situated in a large clinic where X-ray could be used on each case or it was not necessary to consider the patient's economic welfare we would certainly place X-ray as of first importance but doing private practice as do those listening to me and realizing the comparative simplicity of gastric analysis we believe it is one method of study deserving wider use.

Again we wish to stress that one should never lose sight of the fact that both gastric secretion and motility are frequently influenced by extrinsic factors and because these findings may be abnormal do not mean organic gastric disease. One should always remember that gastric symptoms and findings may be reflex and a thorough and proper study of the whole picture must be completed.

We have mentioned the use of the stomach tube but its use means the removal of the stomach contents and here today is a rather controversial question as to the best method of studying the stomach contents.

There have been many methods suggested as best to use in studying the secretory function of the stomach but we are only going to mention three or four. The one used for the longest time and probably more universally has been the Boas-Ewald Test meal. There have been several variations in its use but we think that the patient should be studied in the morning with nothing in his stomach since midnight and no food since the previous evening. The fasting contents should be removed and studied. Then the test meal should be given after the tube is withdrawn. We use 7 Arrowroot crackers with one glass of hot water and one glass of cold water. Two slices of toast could be used equally as well but the crackers are more convenient for office use, however if the meal is taken at home then toast is usually preferable.

After 30 minutes it is desirable to introduce the tube and fractional removal is made at 15 minute intervals for four fractions. This may be reduced to 2 fractions at 45 and 60 minutes but does not give as complete a picture. Some advocate longer intervals of 30 minutes for 4 fractions which gives an even better picture but frequently is rather uncomfortable to the patient.

There are certain advantages and dis-

advantages to this method, such as the type of meal stimulating secretory and motor activity and as a disadvantage the need for swallowing the tube the second time. Some do not use the fasting contents and simply use the meal study.

The second most frequent meal study has been the Alcoholic Test Meal, which is administered on a fasting stomach. The tube is passed and the fasting contents are removed. Immediately through the tube is administered 50 cc of 7% alcohol solution in distilled water. Four fractions are removed at 15 minute intervals and studied in the usual way. This method is shorter, for the stomach is usually empty in one hour and it does not necessitate the removal and reintroduction of the tube. However it does not allow a study of the motility of the stomach and this meal is not stimulating to the secretory function.

More recently the Histamine Method of study has become popular and certainly has some advantages. Its method is to remove the fasting contents, then administer Histamine Hydrochloride by hypodermic as a gastric stimulant. Usually .1 mgm per 10 kilograms (22 lbs.) of body weight is used. At 10 minute intervals for 4 times the contents are aspirated and studied. This gives a pure juice but both the quantity and degree of acidity are usually in excess of normal food stimulation. Also there may be some reaction from the drug both locally and systemically, which may be quite disagreeable.

These methods though briefly presented are the ones most widely used but we still feel that the Boas Ewald meal is the one of choice and Histamine is only used when there is marked hyposecretion or achlorhydria at which time it is of particular importance to determine if any secretory function is present.

Some years ago we presented a review of our cases of achylia gastrica and from that study and even to the present time we feel that the approximate 10-12% of cases that present these findings are much more frequently missed or improperly diagnosed without a gastric analysis than any other group. As stated then, if for no other reason than for the satisfaction in handling these cases we would deem gastric analysis an invaluable aid and would not be willing to discard its use. X-Ray or no other laboratory method can be of great assistance in these cases and they are the most grateful patients after a diagnosis is made and treatment is instituted.



Having outlined the methods most popular and best suited for study of the gastric secretion and motility it seems proper to review the interpretations of these fractional analyses.

First and quite important is the quantity removed after a test meal study. The fasting aspiration should normally be from 30 to 50 cc and any quantity in excess of 100 cc should always be regarded as abnormal, meaning either obstruction, hypersecretion or hypomotility. An interpretation of this may mean an obstructive lesion, abnormal secretion of amount or an interference with motility. After a Boas Ewald meal the amount usually is 50 to 150 cc.

Next in importance is the appearance of the material removed. It should be digested and have the appearance of chyme if the Boas-Ewald meal is used. If the Alcoholic meal is used there should be no food particles present and of course the same is true of the histamine study. The most frequent abnormal appearance is failure to digest the food taken. Often there can frequently be detected the presence of bile which denotes regurgitation. Occasionally blood may be grossly present and should be noted.

These points having been noted the titration figures next become important. The acidity usually is read in degrees of acid but some authorities give a percentage reading and to transpose the degree reading is to simply multiply by .00365. All authorities agree that .1 to .22 are normal limits for the HCl; this of course includes the free and combined readings. In degrees we usually consider 25 to 30 degrees of Free HCl as normal and a total acidity of 70 to 80 as normal.

With these limits we realize that hyperacidity as such is not nearly so common as once supposed. It is conservatively estimated that only about 30% of cases show true gastric hyperacidity. About 50% show normal ranges and only about 20% show subacidities. Having classified a case as to its degree of acidity we are usually in a better position to proceed with a sound study of the case.

The next important factor from the aspirated contents is to know whether blood is present and to have some idea as to the amount and whether it is in each fraction. We use the Benzidine test which is rather sensitive and also rather simple.

Thus far we can know the appearance,

amount removed, the degree of acidity and whether blood is present. From the history of the case and the findings thus far we usually conclude as to the desirability of an x-ray study and also how far to go with this study, that is whether to limit it to the upper tract or to do a complete gastro-intestinal X-ray or frequently whether a gall-bladder X-ray is desirable.

As we mentioned earlier in the paper this study is especially valuable in our cases of anacidity and at this point we want to stress again the value of the histamine study. Whether it is done on a fasting stomach or in the later intervals on a stomach that has had a Boas Ewald test meal, it is of tremendous aid in determining whether there is any secretory function and the degree of function. No case of achylia gastrica can be properly classified as such without the use of histamine.

Those cases showing subacidity with histamine usually do well on HCl treatment but should be regarded as potential cases of pernicious anaemia and receive some liver therapy, while those cases showing no secretory function are or will be pernicious anaemic cases and should all be treated as such. Aside from the absence of HCl these cases should show a total acidity of less than 12-15%.

When achylia is met with there are several conditions that should be thought of at once as of especial interest:

- (1) The late stage of Chronic Gastritis.
- (2) Arthritis deformans and gout—or under more recent terminology Chronic Infectious Arthritis. These should very frequently suggest acid therapy.
- (3) Various infectious diseases—tuberculosis, chronic sinusitis.
- (4) Parasitic diseases—hookworm.
- (5) Chronic systemic diseases—chronic nephritis and myocardial disease.
- (6) Pernicious Anaemia.

Again this picture emphasizes the importance of a thorough medical knowledge on the part of the individual doing gastro-enterological work.

We would like to stress here also a point that seems to be too often overlooked and that is the value of analytic studies more than once in those cases that do not show proper response to treatment. We find too frequently that patients report previous test meal studies with such findings and when we follow our routine procedure very often the aforesaid condition does

not exist. There may be several explanations, such as failure to get the tube in the stomach, or a single aspiration with a false picture.

There is one other point that has been brought quite forcefully to our attention and which we feel has never been emphasized enough and that is the frequency of gallbladder surgery in those individuals who come to us complaining of the same symptoms which they experienced before surgery and in doing a test meal study to find almost always a subacidity and very frequently an achylia. We do not feel that all gallbladder cases fall in this group but when we recall that one of the functions of HCl is to stimulate the opening of the ducts, then in those cases of low acidity it seems logical that there might not be the proper emptying of the gall-bladder and infection could well result. It would seem a more thorough and conservative method to undertake gastric analysis in all chronic gall-bladder cases before resorting to surgery, realizing that there may be gall-bladder emergencies that do not permit of such study.

#### EVOLUTION OF THE WALKING-IRON, TURNBUCKLE, AND JOINT HINGE IN FRACTURES

MISCH CASPER, M. D.

Louisville

Walking irons have been used by surgeons independently at various periods. We, and no doubt others, too, thought that we had discovered these useful implements to aid the unfortunate sufferer of a broken limb; however, some time ago in a periodical we came across a substantial duplicate of these appliances that were used over a hundred years ago, and cuts were taken from an old German book of surgery to show the methods in use at that time. So now all claimants to priority will have to bow to our predecessors, and we learn once again that "There is nothing new under the sun." It is true that those old methods were crude, principally a block and tackle arrangement with wooden screws and windlass-like mechanism, and were fastened on with bands and strap fasteners; but the interesting part about them was the fact that they were worked out so many years ago, and must have proven satisfactory.

Modern textbooks on surgery say very little about walking irons. Thomas described his still popular splint in about 1880. It was partly forgotten until rein-

troduced universally by Sir Robert Jones in the first World War. In the 1917 edition of Stimson's Fractures, Professor Dolinger was quoted as reporting at the International Society a large series of fractures of the thigh and leg treated with good results by a form of ambulatory splint. Keen's Surgery, 1921 edition, and Kellogg Speed in his textbook of 1928 both mentioned a walking caliper, which in reality is a modified Thomas splint fastened to the shoe and supplemented by supporting leather straps above and below the knee. The latter, which was devised for fractures of the femur and permits some weight-bearing, is usually used after the patient leaves the hospital and has a good amount of callus formation. Whitman's Book on Fractures, 1930, illustrated another modified Thomas ambulatory splint. Boehler's Book on Fractures,



Upper left corner: 3 pairs of turn-buckles. Original No. 1 turnbuckle kind used on screen doors; No. 2 improved, original made to order; No. 3 improved for multiple pins. Upper right corner: 3 walkingirons: No. 1, simple angle iron. Below: joint hinge.

1935, described both turnbuckles and walking irons. Willis Campbell's Book on Orthopedics, 1939, described turnbuckles. Watson Jones' Book on Fractures, 1941, fails to mention any of these, but does mention a walking cast.

One of the most complete accounts we found was written in 1891 by Kraus, who recommended a method of treatment of fractures of the bones of the leg which would permit a patient to walk as soon as a cast could be applied to it, the following advantages being cited: (a) old or feeble persons are much less liable to attacks of pneumonia (hypostatic) or bronchial troubles; (b) delirium tremens is less



likely; (c) there is little muscular atrophy; (d) callus formation is abundant; (e) return to work is much sooner; (f) decubitus does not occur. All these advantages still hold good, and in addition we may add that early union is promoted, joints are kept mobile, the patient walks while he heals, and can attend to some duties instead of lying in the hospital.

In our work with fractures we have studied textbooks rather extensively, hoping thus to corral various earlier views and usages so that we might thus establish a working foundation on which to base this important method of handling fractures.

First, we used ordinary hoop iron, stirrup shaped, after successfully using this method on foxhounds, which frequently suffer fractures of their legs. One time, after a hound was hit by an automobile and sustained a fracture high up on the front leg, we put it up with a piece of hoop iron, stirrup shaped, and encased it in plaster Paris. The hound was tied in the yard, and that night when a pack of hounds was running a fox close by, he got loose and ran with them all night. We thought that all our work would be ruined, but when he came in the next morning, much to our surprise, we found that his leg was none the worse, except that the plaster was somewhat roughened up. After that, he ran around the yard, putting his weight on the hoop iron loop. He healed perfectly, and was a valuable and even famous foxhound for several years afterward.

Another time, about twelve years ago, while managing a boys' baseball team, we had our captain and second baseman to sustain a Potts' fracture of the ankle. He begged us to fix him up so that he could get out to the games. When we explained the foxhound episode, he asked us to put a similar walking-iron on him, and we did just that. The boy not only went to the ball games, but coached his team and one time acted as pinch hitter. He got a perfect result.

Soon, we changed to a heavier and stronger angle iron. Still later, we fastened to the angle iron a metal sole, shaped to the foot, and the metal sole then was fitted into a tennis shoe, all including the shoe encased in plaster cast. After awhile, we encased the horizontal part of the angle iron in a four inch segment of garden hose.

Walking irons now are much improved over those early models. Many types are

now available: hospital, crutch, or skate type, also with flexible upper part or shaft of iron. In any method of fixation we must not lose sight of the necessity for accurate coaptation of fragments and of holding the fragments in the proper alignment. Fracture treatment now involves more accurate craftsmanship than formerly; the populace is more exacting, and the X-ray more revealing.

There is very little in the literature about turnbuckles, though they are described in Willis Campbell's 1939 Book on Fractures. Our first use of turnbuckles thirty-five years ago was with the 20c kind used on screen doors. Later a local machinist made us a heavier one; then we devised different sizes of rustless steel and had them made in Warsaw, Indiana. The idea was to use two pins (Steinmann), one above and the other below the fracture. Now we often use three or four pins. Thus, skeletal extension and exact apposition of fragments are obtained, muscle contraction is counteracted, and, when the turnbuckle is used in conjunction with walking-irons, the weight is bridged or transferred beyond the fracture site.

Turnbuckles are equally as effective in fractures of the arm or forearm as they are in fractures of the thigh and leg. In fractures where it is difficult or impossible to secure exact apposition by manipulation, it is surprising how readily the fragments slide back into alignment when skeletal extension is applied. This is especially true of fractures of both bones in mid-forearm, a very difficult fracture to set so that all four fragments are in true alignment. Also, the surgeon may reduce the incidence of radio-dermatitis on himself by turnbuckle reduction instead of manipulation under the fluoroscope.

To most people the idea of pins in their bones is repugnant, but if it is properly explained to them that the operation is a minor affair done with only a local anesthetic, they will be cooperative; at least, we have had no refusals. Some few cases of osteomyelitis have been reported, though we have seen none. If the pins are inserted near the epiphyseal end in the more cancellous bone, we believe it will not occur. Anyhow, thanks to the sulfonamides, a possible rare osteomyelitis does not hold such a dread now as formerly.

While something has been said in the texts about walking irons, and much less about turnbuckles, nothing so far as I can

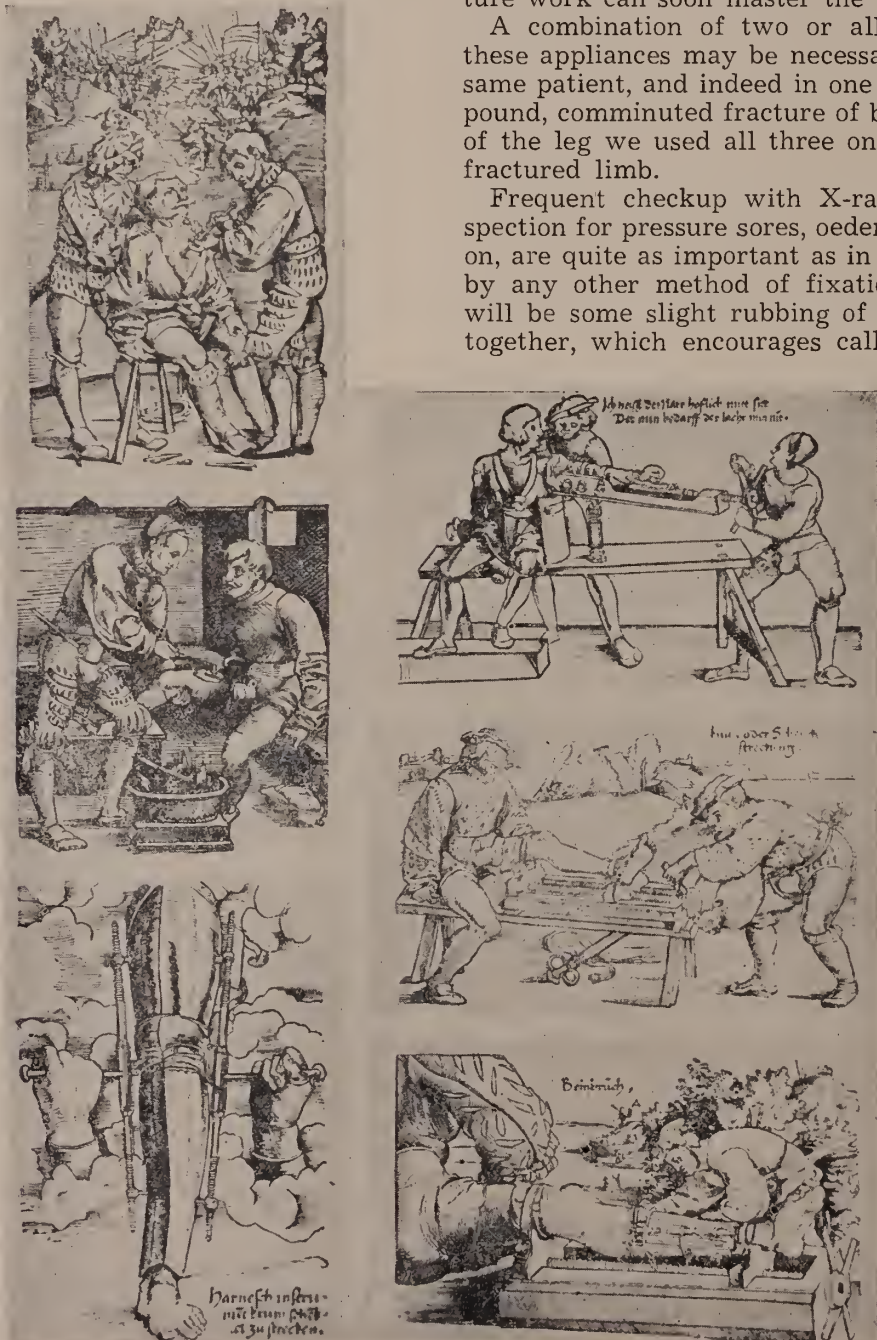
find has been said about the use of joint hinges in fractures to allow motion in the joint when the patient is at rest or in a sitting position.

One of the worst complications of fracture treatment is stiff, painful, and ankylosed joints. This is especially true in delayed or slow union and long fixation. The metal joint hinge will work in other joints, but it is especially valuable for the knee

joint. The principle is a plaster cast below the knee, another above, with metallic joint hinge incorporated in each, using an internal and external hinge placed in a parallel axis. The technique of application of any of these appliances is very important and demands a certain amount of skill and mechanical ingenuity; however, as other methods of fracture treatment require a similar skill, any one doing fracture work can soon master the technique.

A combination of two or all three of these appliances may be necessary on the same patient, and indeed in one bad, compound, comminuted fracture of both bones of the leg we used all three on the same fractured limb.

Frequent checkup with X-ray and inspection for pressure sores, oedema, and so on, are quite as important as in treatment by any other method of fixation. There will be some slight rubbing of fragments together, which encourages callus forma-



Illustrations taken by Ciba from a German textbook a hundred years old. Lower left corner: turnbuckle. On right side note crude method for extension and counterextension.



tion and ossification, very much like freshening and roughening up the ends of fragments by open operation in non-union fractures.

The so-called "bumper" fracture of the leg is getting more and more common. Patients, too, are more restless nowadays, and find it is a real hardship to lie in the hospital six or eight weeks, when they could be getting around and attending to at least part of their daily routine. By these mechanical means of handling fractures a physician-patient can even attend to some of his practice and, as a class, the doctor generally prefers this method if he himself is the patient. Walking while you heal presents so many obvious advantages, I don't think there is any argument about the value of these various mechanical devices. Results are what count. We have not had a bad result, though our series is not large. Also, these methods are fast becoming widespread, and are accepted as sound generally at this time.

The cheerful, joyous patient who walks while he heals is commendation enough to justify further development of the walking-iron, turnbuckle, and joint hinge; and I am sure that if our predecessors of a hundred years ago could see the progress that has been made with their ideas, they would be more than gratified.

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### POLIOMYELITIS

J. O. NALL, M. D.

Marion

This paper is based on the symposium of articles in the Journal of the American Medical Association on July 26, 1941 and on six lectures given at Vanderbilt University in April 1941 and now available in the monograph entitled "Infantile Paralysis."

Clark defines poliomyelitis as an acute infectious disease caused by a filterable virus, occurring in epidemics and sporadically, and characterized by varying degrees of injury and degeneration of the central nerve system, with special localization in the anterior horns, and the motor nuclei of the medulla; clinically, it shows marked diversity in symptoms from mildest malaise to complete flaccid paralysis of many groups of the skeletal muscles with possible death through involvement of the respiratory centers in the medulla.

The causative virus has sufficiently dis-

tinct properties to permit its identification with as much certainty as is possible for any of the well known bacteria. It is one of the smallest filterable viruses, its size having been estimated at approximately ten millionths of a millimeter. Thus it can pass through the finest filters and membranes. The virus is resistant to phenol and ether but it is most readily destroyed by oxidizing agents such as hydrogen peroxide and potassium permanganate, by ultraviolet rays, and by heating at temperatures of 130 F or higher for as short a time as five minutes.

Poliomyelitis has existed for many centuries. The report of 4 cases in Worksop, England, in 1835 is commonly accepted as the first recorded epidemic of the disease. Jacob Heine of Germany, in 1840, reported on 27 isolated cases giving the first clear description of the acute disease. Caverly in Vermont in 1894 added greatly to our understanding of the disease by the recognition of nonparalytic or abortive cases. A study of the epidemics of this disease shows practically worldwide distribution with especially heavy incidence in Northern Europe, Northern United States and Canada, and in the comparable regions in the Southern Hemisphere. Both sporadic and epidemic prevalence reach their heights during the late summer and early autumn months, yet winter epidemics have occurred even beyond the Arctic Circle. The striking age distribution which has given it the common name of Infantile Paralysis holds especially true for urban areas where children under 5 years of age furnish 50 to 90% of all cases. In epidemics, the incidence in adults is seldom more than 15%; rarely as much as 30%. There are exceptions, however, for instance, in an epidemic in Guam some years ago the disease occurred almost exclusively in adults. In the United States we find throughout this century an average of about 4500 cases annually with epidemic peaks in 1916, 1921, 1927, 1931, 1935, 1937 and 1938, the greatest of these being in 1916 with 27,363 cases. There were 9,770 reported cases in the United States in 1940. Only four times since 1914 has the annual number of cases exceeded this figure.

There are many strains of the poliomyelitis virus and the differences between some of the strains are so great that we might be justified in regarding poliomyelitis as a group of diseases. Toomey lists 8 types of poliomyelitis, namely;

- Type 1, Abortive and Pre-paralytic.
- Type 2, Peripheral Neuritic.
- Type 3, Meningeal.
- Type 4, Spinal.
- Type 5, Bulbar.
- Type 6, Facial.
- Type 7, Hemiplegic.
- Type 8, Cortical.

The signs and symptoms of the different types are as follows: Headache and irritability; moderate fever (100 to 102), lasting from 2 to 5 days; stiff neck; pain along the spine; nausea, vomiting, gastrointestinal discomfort, diarrhea or constipation, pain and cramps, restlessness; and, in some instances, sore throat. One or more of these signs and symptoms are seen in all types of the disease except Type 2, the peripheral neuritic type. In Type 2 the symptoms are of peripheral neuritis over the skin, these symptoms being chiefly paresthesias.

The spinal type (4) is the most common form of the disease, accounting for from 75 to 90% of all cases. The mortality is about 3%. The bulbar type (5) is the next most common type, accounting for from 10 to 25% of all cases. It has the highest mortality, from 75 to 100% of cases ending fatally. The clinical disease is usually a combination of types with spinal or bulbar involvement. The mortality rate is highest in the bulbar group of cases because this type causes paralysis of the respiratory muscles.

Abortive cases have the same symptoms as those seen in an early case of paralytic poliomyelitis. They are not recognized as cases of poliomyelitis, in general, except during epidemics. At other times the majority of such cases are unrecognized under such designations as "acute gastroenteritis" or "grippe." Attempts have been made to determine how abortive cases compare in frequency with paralytic cases. Leake has pointed out that in the 1916 epidemic all but a few reported cases were paralytic. In the 1935 epidemic about 50% were paralytic, while in Virginia during the same epidemic only about 14% were paralytic. Perhaps many of the abortive cases were not recognized in 1916 whereas they were recognized in 1935. In the Connecticut epidemic of 1931 and the Pennsylvania epidemic of 1932 the mild cases were found to outnumber the paralytic cases by at least 8 times. These 1931 and 1932 figures suggest that the attack rates of poliomyelitis approach the attack rates of highly contagious diseases. It has been noted generally that seldom is there more than one

case in a family. By case, in this instance, we mean paralysis, for it is now known that when a diagnosed case occurs in a family careful attention to all members of the family will reveal that most or all of the members had some sort of an illness—perhaps poliomyelitis! Family epidemics are explosive in character—the cases all occur at once, making it evident that all are infected from a common source.

#### EPIDEMIOLOGY

It was originally believed that the poliomyelitis virus entered the body through the nose and that from there it went on into the central nerve system by way of the olfactory nerves. Also, it was originally believed that poliomyelitis was essentially an infection of the central nerve system. But neither contention has been acceptable to all students of the disease. For instance, for 20 years Toomey has taught that the virus enters the body through the mouth and the gastrointestinal tract. The apparent observation a few years ago that the disease could be prevented by spraying zinc sulphate, picric acid and other solutions into the nose lent credence to the nasal route of entry, but the later demonstration that such solutions were worthless for human use gave way to a renewal of interest in the possibility of infection by the gastrointestinal route. Present knowledge points to the gastrointestinal tract as both the portal of entry and exit of the virus. It also points to the belief that poliomyelitis is primarily a gastrointestinal infection, and that it attacks the central nerve system secondarily.

Sabin and Ward have thoroughly studied human poliomyelitis and have mapped the distribution of the virus throughout the body. They state that their work points to almost the entire alimentary tract as the primary site of attack by the virus and that is contains no support for the concepts involving the respiratory pathway. They state further that, from the gastrointestinal tract, the virus begins its invasion of the central nerve system along two pathways: One leading into the medulla by way of the cranial nerves that supply the upper part of the tract or by way of the parasympathetic system along the vagus from the lower part, and the other leading into the spinal cord either along the visceral afferent fibers through the spinal ganglions or along the visceral efferent fibers from the intestine by way of the abdominal sympathetic ganglions. If the greater attack and spread of the virus is



along the first pathway one may expect a syndrome in which the bulbar signs are primary, while if the second pathway is more predominately affected the primary paralysis would be in the extremities. They found that the virus continued to multiply in the alimentary tract long after the disappearance of clinical signs of the disease and that in some instances the virus was found to be excreted in the stools for weeks and months after clinical recovery. With the human portals of entry and exit apparently settled, we may well ask "How is the disease spread from person to person and throughout the community?" Since the virus is found in the nose in active cases, it is probable that the disease is spread from person to person, from nose to mouth; and since the virus leaves the body through the intestine it is also probable that the disease is spread in ways similar to typhoid fever. The general belief is that it is transmitted through a number of different channels. It seems logical to assume that it is spread by the hands and house flies, through foods, fruits, and the like, and through water. Experiments have shown that the virus will remain active in sterile water, at room temperature, for as long as 114 days; and that it will remain active in milk at room temperature for 31 days, and in milk at 50° F for 150 days. Armstrong of the United States Public Health Service states, however, that the virus probably undergoes no multiplication in milk and that there is no evidence pointing to milk as a common source of infection. Poliomyelitis virus has been found in drinking water and in sewage, and it is worth calling attention to the fact that in small epidemics, cases have been grouped about rivers and streams which have been heavily polluted with sewage. This was first noticed in Vermont in 1894 during an epidemic along the Otter Creek Valley.

That brings up the question of the resistance of the virus to chlorine, which is now generally used for the sterilization of drinking water, swimming pools, etc. It has been found that 4 ppm of chlorine are capable of rendering artificially contaminated, slightly turbid water non-infectious after 24 hours, while .4 ppm is effective in contaminated clear water in the same length of time. Kempf and Soule in 1940 found that .5 ppm rendered the virus inactive in water after 4 hours. They

found in 1941 that 1 ppm in tap water failed to inactivate the virus after 4 hours exposure, the chlorine having fallen to .2 ppm during the course of the experiment. A concentration of 1.5 ppm in tap water did inactivate the virus in 20 minutes and a concentration of .5 ppm inactivated it after 1 hour. These findings do not necessarily mean that the amount of chlorine usually used in municipal water supplies would be ineffective against poliomyelitis virus but they open the question of whether the disease is water borne and of whether the virus in city epidemics may be spread through the water as a result of insufficient chlorination!

#### PREVENTION AND TREATMENT

The theory has been advanced that poliomyelitis attacks youth chiefly because of some glandular imbalance or nutritional deficiency, but no such cause has been proved. Draper has laid stress upon the importance of constitution in relation to susceptibility to poliomyelitis. He believes that certain morphological characteristics such as a broad round face, a great width between the eyes, widespaced teeth, a high narrow palate, etc., mark individuals who are more likely to succumb to the disease. Attempts have been made to characterize these distinctive morphological features in a quantitative manner but without a great deal of success. Some of Draper's observations seem to indicate that the characteristics of a portion of susceptible persons were determined by a hormonal imbalance, particularly that involving the gonads, pituitary gland, and adrenal cortex. These ideas are not accepted as being of preventive value. The general conclusion has been reached that there is no significant association between blood groups and susceptibility to poliomyelitis.

Prevention has been attempted on both active and passive bases—active immunization with vaccines, and passive immunization with convalescent and immune blood serum. Active immunization has been tried chiefly in monkeys with results that were variable and generally unsatisfactory. It has also been tried in humans, with little success. A modified virus was used, and in some instances the results were tragic. In 1935, 10,725 children were inoculated with Kolmer's vaccine and 2,300 with Brodie's vaccine, and at least 12 cases of the disease resulted under conditions which pointed to the vac-

cine as the source of infection. As a result, human vaccination was discontinued suddenly and has not been attempted since.

Most observers are of the opinion that one attack of poliomyelitis produces a lifelong freedom from the disease. However, there are well authenticated second attacks in the same individual, and one person has been reported to have had poliomyelitis on three different occasions. Some of these reported second attacks are not accepted by some students of poliomyelitis but even so there are still 20 to 25 good examples of reported second attacks in humans about which there is no question. It has been shown by several investigators that there are immunological differences between strains of poliomyelitis virus and that a monkey recovering from an attack produced by one strain can again be brought down by an infection with a different strain. Likewise, it has been shown that two attacks may be induced in the same monkey by a homologous strain. It is logical perhaps to assume that the same thing may occur in humans and that many persons actually do have the disease a second time.

Antibodies appear in the blood of most persons after an attack of poliomyelitis, indicating immunity. Test tube experiments prove that such blood will inactivate poliomyelitis virus. These antibodies are also found in the blood of most adults whether or not they give any history of poliomyelitis. In fact, this investigation has been made world wide in the last 15 years and it has been shown that 75 to 85% of all normal adult populations in various parts of the world, regardless of the occurrence of obvious cases of poliomyelitis, possess neutralizing antibodies against poliomyelitis virus. It is believed that many, many cases of abortive or subclinical poliomyelitis occur to explain this generalized immunity. It is known too that many persons with poliomyelitis possess an abundance of antibodies in the blood at the time paralysis occurs. That brings up the question, "Just what does the presence of antibodies mean in relation to resistance to the disease?" In reply, certain investigators now believe that the antibodies are nothing more than byproducts of infection and play no significant role in resistance to poliomyelitis. The fact that serum containing these antibodies inactivates poliomyelitis virus in the test tube led to its use in humans for the preven-

tion and treatment of poliomyelitis, but it has not been of any demonstrable value. Why? Perhaps there are two explanations: One, the statement made above "that antibodies are nothing more than byproducts of infection and play no significant role in resistance to poliomyelitis." Two, the fact that poliomyelitis is a disease of the nervous system and the virus can not be reached by the antibodies which are in the blood. There is said to be a barrier to the passage of antibodies from the blood to the cerebrospinal fluid, and since for practical purposes the serum must be introduced subcutaneously, intramuscularly or intravenously the antibodies are stopped by this bloodbrain barrier and have no chance to attack the virus. Perhaps one or both of these ideas explains the general ineffectiveness of serum both as a preventive and curative. Likewise, no drug has proved to be of specific value in poliomyelitis, and none is advocated as a specific at present. Potassium chlorate, which was advocated in France a couple of years ago, has now been abandoned as being of no specific value.

Treatment, then, must consist of measures other than serums and drugs.

The first objective in treatment is to preserve all potential neuromuscular units that remain anatomically intact and to maintain the skeleton in proper alignment while the protection of these units is being carried out. No type of treatment will alter those units which are completely destroyed. The object then is to protect the normal tissue that remains and to preserve anatomic continuity of all muscle fibers in which the representative nerve cells are potentially intact even though temporarily unable to function. The entire treatment program for a patient who has had an attack of anterior poliomyelitis divides itself into three phases: The treatment indicated during the acute stage; that indicated during the convalescent stage; and that indicated during the chronic stage. The acute stage lasts from the onset of the disease to the complete disappearance of muscle tenderness. Eight weeks or longer are considered necessary for healing in the cord to take place. The convalescent stage lasts from the end of the acute stage to the time of maximum recovery. This period is usually placed at two years, but it may be longer. The chronic stage continues from the end of the convalescent



stage and represents that period when the paralysis is more or less residual and deformities have become more or less permanent and fixed.

There are two important aspects of the acute stage: 1. The onset of paralysis; and 2, a frequent complication—deep muscular pain and tenderness. The early deformities which occur result from the paralysis, from the deep muscular tenderness, from neglect, and from meddlesome therapy. The patient must be kept in bed for at least 8 weeks. The bed must have a firm mattress; and, if necessary, a plywood board should be placed under it to prevent sagging. The bed clothing should be arranged so that it does not press on the feet and cause foot-drop. The child should be kept on a Bradford frame—it may be elevated on blocks temporarily as desired for the bed pan. Paralyzed extremities must be supported on removable, lightweight, well-padded splints. In paralysis of the arm a platform type splint should be used to support the hand with the fingers straight, the wrist slightly cocked, the elbow at a right angle, and the shoulder abducted to a right angle. In paralysis of the leg the foot must be held at a right angle, with the knee straight and the hip extended. These positions put the affected muscles at rest, they avoid abnormal strain on paralyzed muscles, and prevent to a great degree the development of deformities which result from unequal muscle pull. For paralyzes of the diaphragm and intercostal muscles, a respirator is necessary if the paralyzes are extensive enough to affect the breathing. One other matter is to be considered in the acute stage—that frequent complication of deep muscular pain and tenderness. It must not be confused with the hyperesthesia which occurs during the febrile stage. The deep pain and tenderness come later—they usually appear as early as the second week after the fever has subsided and may continue from two weeks to several months. The pain varies from very mild soreness to an extreme grade which may be so acute that it is difficult to give the patient ordinary bed care. The pain is not confined to the paralyzed muscles—it may be more pronounced in a non-paralyzed area. It is usually present in the calf, the thigh, the hip, the spine, abdomen and shoulder. Patients with this symptom may appear to be very comfortable in bed and show no sign of discom-

fort until some one attempts to move them. Now, the important thing is: These muscles must not be rubbed or massaged. Rubbing and massage are meddlesome and detrimental to the patient and his welfare because they always increase the pain and prolong its period. The more pain these patients have the more they assume bad postures in order to relieve the discomfort—they bend their joints, lie crooked in bed, hold the arms and legs in peculiar positions, etc. to relieve the pain. If these positions are maintained for a few days, muscle contractures occur, and if nothing is done to correct them, the resulting deformities become permanent. Thus, since rubbing and massage of the painful or tender muscles make the pain and tenderness worse, patients who are so treated are apt to be more deformed than if they are let strictly alone.

**TREATMENT OF THE PAIN AND TENDERNESS:** The patient will naturally assume positions to ease the painful and tender muscles. This will occur to a minimum if the pain and tenderness are mild; to a greater extent depending on the severity of the pain and tenderness. Do not forcefully overcome or straighten these deformities. Put the deformed extremities at rest, in the position of deformity, on well padded wire splints. Avoid all pull on the irritated muscles. Then institute hydrotherapy: Apply hot packs for half an hour twice a day to all sensitive areas; or, if it can be managed, place the patient in a tub or tank of hot water, temperature 100° F. (In any event, do not use dry heat; moist heat gives a better therapeutic effect). Under this treatment the deformities will begin to diminish in a few days; and, if continued intelligently, the deformities will disappear entirely within a few weeks. Now as the deformities diminish the wire splints must be corrected and re-applied with the extremity in the new position. This is important—it will avoid irritation—for if irritation is permitted to occur the contractures and deformities will recur and the good effect of the treatment will be overcome. The hot pack or bath regimen must be continued until there is no sign of muscle tenderness. It must be tested for by muscle pull, by flexion and extension, and by pressure exerted by squeezing the muscles by hand, etc.

**CONVALESCENT STAGE TREATMENT:** After all tenderness has subsided, treatment to restore function is instituted; also, deform-

ities must be prevented, or if they do develop immediate measures must be taken to correct them. Rest must be continued and the paralyzed muscles must be exercised. The exercises are active contractions of the affected muscles. Treatment in this stage is properly a hospital procedure.

**CHRONIC STATE TREATMENT:** Treatment in this stage is a question of salvage. The treatment divides itself into five main considerations:

1. The patient who will always wear braces and for whom nothing else can be done.
2. Improvement of function by tendon or muscle transplantation.
3. Securing stabilization of weak joints by means of bone operation.
4. Surgical correction of inequality of the extremities.
5. The correction of fixed deformities.

Most of these treatments are hospital procedures.

#### USE OF THE RESPIRATOR

The use of the respirator is clearly indicated only when difficulty in breathing is due to paralysis of the respiratory muscles. These muscles are the internal and external intercostals and the diaphragm.

The early signs of respiratory paralysis are so important that to recognize them may be the difference between life and death, if a respirator is available. The early signs are: wakefulness, restlessness and anxiety. A little later there is an increase in the rate of breathing, dilation of the nostrils, a slight respiratory grunt, and a disinclination to talk. If none of these signs are noted but there is a paralysis of both shoulders, or of the neck muscles, this will probably be followed by respiratory paralysis. A late sign is generalized cyanosis, which results from the weakness of the respiratory muscles. Death soon follows.

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There is nothing dramatic about tuberculosis either to the patient or to the onlooking public. Its insidious onset or deceptive approach, its chronic course, its cruel and exacting requirements, its constant and wide prevalence have made tuberculosis the great battlefield of medicine where victory demands not only everything which the medical profession has to offer, but active participation by the public. Charles R. Reynolds, M. D., Bull. Nat'l Tuber. Assn., Aug., 1940.

## RECENT ADVANCES IN TREATMENT OF CONTAGIOUS DISEASES

JAMES W. BRUCE, M. D.

Louisville

Contagious diseases have always been a problem for the general practitioner. One of the difficulties is isolation of the patient. We are getting away from the idea that dipping the hands in a pan of antiseptic is necessary, and are depending entirely on soap and running water to remove contagion from the hands. Paper towels are most convenient, and should be had in abundance. Gowns are advisable and should be worn in the sick room, and discarded at the door. Masks are falling into disrepute, and in many large contagious hospitals are no longer used.

Contagious diseases often require hospitalization, and there we run into a serious problem. Very few hospitals will admit contagious diseases. In most cities the only hospital open to contagion is the City Hospital. Most private patients do not want to go to a City Hospital, and patients from outside the city limits are not allowed to be admitted. Private contagious hospitals have a difficult time making both ends meet which explains why there are so few of them in this country. The trouble is there are long periods of time when the hospital may be empty, and it is impossible to maintain a staff of nurses and residents with no patients. Private general hospitals are loath to establish contagious wings because the public fears contagion, and would not patronize such a hospital.

Taking up the contagious diseases individually, there has probably been more progress in the treatment of meningococcus meningitis than any. Chemotherapy with the sulphonamide drugs has been so successful that we are coming to depend more and more upon them, and less upon serum. Sulphanilamide and Sulphapyradin and now Sulphadiazin are very effective against meningococci. Sulphanilamide is so toxic that we do not use it as much as formerly; Sulphapyradin is less toxic, but often causes vomiting; Sulphadiazin looks at present to be the choice drug. We have such confidence in these drugs that we believe in most cases in depending entirely upon them for a period of 48 hours. If at the end of 48 hours of intensive chemotherapy the patient is no better, then serum



should be used. We have had better results with meningococcus antitoxin intravenously than with any kind of serum intraspinally. So when chemotherapy has not produced improvement in 48 hours or in case we do not think it safe to wait for 48 hours, we give a large dose of meningococcus antitoxin intravenously well diluted with glucose or saline. We recommend doing a diagnostic spinal puncture, and then if the patient is doing satisfactorily clinically, we do not do any more spinal punctures. Draining off spinal fluid by repeated punctures is not necessary to the healing process. Puncture may give temporary relief from headache. Elimination of intra-spinal serum treatments and of repeated spinal punctures has done much to make the course of meningococcus meningitis less painful.

Little progress has been made in the treatment of poliomyelitis. Vitamin B<sub>6</sub> has been suggested to increase the resistance of the nerve cells but we can not say as yet how valuable it will prove to be. It can certainly do no harm. The question of giving large doses of plasma or blood intravenously during the preparalytic stage is still being debated. It can do no harm, but there certainly is no proof that it does any good. The use of intravenous hypertonic solutions e. g. sucrose, glucose, or saline to dehydrate the brain and spinal cord may have some temporary effect, but that is all that can be expected of them. Dehydration may also be accomplished by the use of Magnesium Sulphate by mouth to produce watery stools, and by withholding fluids. The dehydration process should not be carried to the point of discomfort to the patient because we are not certain how valuable it is anyhow. We are coming to seek orthopedic advice earlier in the disease than formerly. We used to wait 3-4 weeks to call the orthopedist meanwhile paying little attention to the position of the arms and legs. We now believe it good practice to put on light splints early to immobilize the parts. I much prefer splints of the Toronto type to plaster until all pain is gone. The pain in poliomyelitis may be quite severe, and can be greatly benefited by heat lamps. If the extremities are covered with plaster, the heat can not do any good. The use of spinal punctures in poliomyelitis has caused much debate. Some believe that repeated punctures relieve pressure and give better chance for recovery. There is no evidence to substantiate this statement. On the other hand it

is believed by others that the sudden release of pressure caused by spinal puncture is harmful and likely to spread the disease. There is no proof of this statement either. However, since it has not been shown that puncture does any good, I think it is better not to do it, except for diagnosis. In cases where the diagnosis is obvious, i. e. where paralysis has occurred, it is not advisable to puncture at all. Repeated examinations with testing of reflexes and muscle strength are to be deplored. One complete examination a day is all that is needed, and the remainder of the time the patient should be at as nearly complete rest and immobility as possible. After all rest is the best treatment both in prevention and cure and nothing should be allowed to interfere with it. Sedation is usually necessary and barbiturates are best for this.

The respirator or "iron lung" is a life saving measure in cases where the muscles of respiration are involved. It is of no value and may do actual harm in cases of failure of the respiratory center. The diagnosis between these two types of respiratory failure is made by observation of the amplitude and rate of respirations. Failure of the muscles of respiration is characterized by shallow regular breathing—the patient just can't take a deep breath. Failure of the respiratory center is characterized by irregular breathing, and this is what makes the "iron lung" no good because it can not be synchronized with the patient's efforts at breathing. On the other hand it can be perfectly synchronized with the weak regular breathing of tired muscles and should be used just as soon as the condition is recognized thus avoiding the muscular fatigue that is so dangerous in this disease. The prognosis of patients who have had to be in the respirator is not so good. Their respiratory muscles usually do not regain their strength, and these people fall easy prey to respiratory infections.

Retention of urine is a very common and unpleasant condition which occurs quite frequently in the first week of the disease. I have not heard a satisfactory explanation of why this occurs. Acetocholin sometimes is of value in treatment, but usually the catheter has to be resorted to and here lurks the danger of infection. Fortunately the condition rarely lasts more than a week or ten days. I never heard of it being permanent.

The later treatment of poliomyelitis is

an orthopedic problem which I am not adequate to discuss.

Scarlet fever is a disease which has responded to serum and chemotherapy. Serum is valuable in the first few days to combat toxemia. It is doubtful if serum does any good in preventing complications—in fact several series of cases have been reported in which complications were more common in treated than untreated cases. Serum should not be used in every case of Scarlet fever, but only in those that seem toxic. About 20% of the cases at the Louisville City Hospital receive serum. It can be given intramuscularly or intravenously diluted with glucose. Human convalescent serum can be brought from the serum centers in Philadelphia or Minneapolis, and sent air mail. It is dehydrated and must be dissolved in water before using. It contains less antitoxin per c. c. than commercial serum, but of course, is less apt to cause reactions. The Sulphonamide drugs have little effect on the toxemia of Scarlet fever, but they do cut down complications materially. Sulphanilamide is very effective, but so toxic that it is being replaced by Sulphathiazol. Sulphadiazin may prove to be good in this disease. We usually give Sulphathiazol in full doses while the fever lasts, and then gradually cut it down. It is rarely necessary to give it more than a week. If a complication does arise, the drug can be started again.

We had a severe epidemic of measles in Louisville last winter, and had a good opportunity to try sulphonamide drugs. I was not impressed with any good derived from treating mild or moderate measles with Sulphathiazol, but severe measles was greatly benefitted by it. Temperature came down quickly, and there were few complications. It has been shown that there is a certain amount of bronchopneumonia in almost all measles, and this is more extensive in the severe cases. This is probably why Sulphathiazol is more effective in severe cases.

Nothing new has come out about Diphtheria. It does not respond to sulphonamide drugs.

Whooping cough bronchopneumonia is another dread disease which has usually responded to sulphathiazol. We have had a number of these cases in the contagious department of the Louisville City Hospital, and Sulphathiazol in conjunction with oxygen and blood transfusions has been very successful. The action of Sulphathiazol

is variable in any form of bronchopneumonia because it is a mixed infection and may be caused by an organism that does not respond to chemotherapy.

Diarrhoea of any kind should be classed as a contagious disease, and the sufferer should be promptly isolated. Disregard of this has resulted in spread of diarrhoea through nurseries, wards, and families with disastrous and fatal results. We formerly thought we could separate infectious from non-infectious or nutritional diarrhea by demonstration of blood and pus in the stools of the infectious type and positive stool cultures. We now feel that the appearance of the stools is not always diagnostic and stool cultures are unreliable. We consider all diarrhoea contagious.

Dysentery or infectious diarrhoea has been found to respond well to Sulphathiazol and Sulphaguanidin. It is given in full doses and has caused very little difficulty. Our routine treatment for Dysentery is Sulphathiazol or Sulphaguanidin and a diet of buttermilk and bananas. Glucose and saline subcutaneously and intravenously and blood transfusions are used in the more severe cases. Since it is impossible to separate infectious and non-infectious diarrhoea, we treat them all alike. However, we get better results with chemotherapy in frankly infectious cases with bloody stools than in so called nutritional cases without bloody stools.

An out break of diarrhoea occurred in the nursery of one of our private hospitals this spring. There were about 25 cases altogether. The infants were treated with Sulphaguanidin and intravenous glucose and saline, blood and human breast milk. Some of the babies were very ill, but none of them died. This compares well with similar out breaks of infectious diarrhoea of the new born reported in the literature. It is a very serious disease.

#### SUMMARY

1. Contagious technique is being simplified. Bad smelling irritating antiseptic solutions are being replaced by soap and running water.

2. A great need in Louisville and in most other American cities is for better hospital facilities for contagious diseases.

3. Chemotherapy has proven of great value in the treatment of many contagious diseases. This is especially true of meningococcus meningitis, scarlet fever and dysentery.



FALSE SECURITY IN ARTIFICIAL  
PNEUMOTHORAX

PAUL A. TURNER, M. D.

Louisville

A little over thirty years ago Tuberculosis specialists began to talk about a new treatment for tuberculosis, called artificial pneumothorax. Some of them constructed an apparatus with which nitrogen, or air, could be introduced into the pleural cavity. In those days the new treatment as I remember it was used chiefly in an endeavor to stop hemorrhage. In the first case I tried, the hemorrhage stopped after 2000 c. c. of air had been injected in one treatment. No x-ray, no fluoroscope, no knowledge, but a dramatic result, in spite of how the patient felt. Many men had a similar experience, so, of course, scientific studies resulted, and reports of cases of tuberculosis treated with pneumothorax began to appear more and more in the literature. So favorable were most of these reports that within ten years artificial pneumothorax became an accepted method of treating pulmonary tuberculosis. During the next five years there was considerable discussion as to when pneumothorax should be started and upon what type of case it should be used. The majority of men, at that time, considered it best to try rest in bed for a number of months, followed by an attempt to give pneumothorax if the patient did not improve in a satisfactory manner. The minority believed that there should be no delay in starting pneumothorax, if possible, especially if a cavity were present.

At about this time, approximately fifteen years ago, it was universally thought that pneumothorax would prove to be a great aid in reducing the death rate from pulmonary tuberculosis. As time went on, such was the publicity in regard to this treatment that the laity in many instances came to believe that pneumothorax was a panacea—all that was necessary to get well of tuberculosis was to have air injected into the pleural cavity. It was said in some medical quarters that a tuberculosis patient given pneumothorax could be treated as an ambulatory patient and even continue his work. Occasional reports of such cases becoming cured favored this belief. Tuberculosis patients also have been known to go West and climb mountains and become cured.

During the last ten years, however, there have been so many improvements in methods and techniques used in treating tuberculosis that evaluation of pneumothorax per se seemed necessary.

To those who analysed the figures it became evident that artificial pneumothorax had had no effect in reducing the death rate from tuberculosis, although the treatment may have had some influence in moving the higher rates to older age groups. In other words, lives were perhaps prolonged somewhat, but no greater proportion of patients was eventually cured. Many patients in the more recent years have been carried along as pneumothorax cases when the treatment did not effectively collapse the diseased lung, and they were given a false sense of security. Physicians continuing these treatments did so with the ever-present hope that the next refill might produce the desired result; a cavity might close and a positive sputum be converted into a negative one. This occurred frequently enough to encourage the physician to try pneumothorax on the next case. A complete collapse of the diseased lung and rapid arrest of the disease occurred rather infrequently. Such cases as these were usually those of early disease, found early, and collapsed before the pleura had become affected. In one hundred consecutive admissions to Hazelwood Sanatorium immediately prior to July 1, 1941 I had one such case. The inference is, of course, that we do not get many early cases, and I suspect this is still true of by far the majority of Sanatoria.

The question arises, therefore, should we continue to employ artificial pneumothorax as the method of choice in the treatment of tuberculous individuals? Judging from Dr. Soderstrom's contribution in the August, 1941, issue of the American Review of Tuberculosis, the answer is NO. The material for his article was taken from the case records of Trudeau Sanatorium of patients who had had on admission moderately advanced disease. A five-year period was selected from July, 1927 to October, 1933. 201 cases of pneumothorax and phrenic nerve interruptions were compared with 201 cases receiving only routine Sanatorium care. May I quote directly from his discussion:

"The findings of this study would seem to indicate that the true and final evaluation of collapse therapy, as to its effect in

curing tuberculosis, is yet to be made. Further, it is indicated that though collapse therapy when used in moderately advanced cases may be productive of superior results in the management of isolated cases, it has not made itself strongly felt in changing the end results of the group as a whole.—Those patients at Trudeau who did not receive collapse therapy showed much better morbidity and mortality rates than those who did."

One might infer, therefore, that the induction of pneumothorax is a waste of time, labor, and money, and that a group of patients would do as well or better with routine Sanatorium care.

Such an inference, I believe, would not be possible if Dr. Soderstrom had reviewed only the pneumothorax cases that were considered effective in collapsing diseased areas.

Effective collapse presents an entirely different picture from the gloomy one I have been presenting. This is a picture bright with promise, and I venture to say that in another few years statistics will prove that effective collapse therapy will be the leading factor in the further reduction of the death rate from tuberculosis.

Artificial pneumothorax which is not effective or can not be made effective in, at most, three or four months' time should be and will be abandoned, the lung re-expanded, and some other form of therapy instituted. Effective pneumothorax and pneumothorax made effective by intrapleural pneumonolysis will doubtless continue to be the methods chiefly resorted to in the treatment of active disease.

The judgment of the specialist, however, as to whether or not a given pneumothorax is effective is sometimes very rudely shaken by subsequent events. I can personally testify to such events on, I confess, too many occasions. Patient and doctor both held a false sense of security. An apparently effective pneumothorax didn't follow a course to uneventful lung re-expansion and cure. Such eventualities must be rigorously guarded against if we are to obtain the expected results.

In the first place, as I have said previously, artificial pneumothorax which is not effective in closing cavities and collapsing diseased areas and can not be made effective by intrapleural pneumonolysis should be abandoned, and abandoned early. The patient then may be given a chance to recover through some form of major chest surgery. If the ineffective pneumothorax

is continued, the patient may readily become worse by spread of the disease, or complications, such as, empyema and broncho-pleural fistula, so that major operation would then be difficult or even contra-indicated. Such patients should not be given false hopes by continuing refills.

An apparently effective pneumothorax, moreover, may not be what it seems, and unexpected complications may arise during the years of refills that may influence the patient's cure. An innocent-looking adhesion may prevent a complete collapse, although the pneumothorax may appear by x-ray to be effective, and, too, the patient's sputum may be persistently negative. I have had a number of such cases which develop a cavity in the compressed lung, and after two years of refills and persistently negative sputum. Two years of false security just because an adhesion wasn't cut!

False security in another type of case is one with a complete collapse when the patient leaves the Sanatorium, but refills are not continued at the advised intervals. The cavity is allowed to open and close like a bellows, so that a spread of the disease occurs in the other lung.

In another group of cases the diseased lung may be completely collapsed with pneumothorax, so that it looks to be about the size of a fist. A pneumonic area present may often shell out, a cavity form, and bronchogenic spread occur in the contralateral lung.

In a fourth group the pneumothorax may be satisfactory but the right heart so affected that Cor Pulmonale results. Fortunately, these cases are relatively few.

Finally, the complications must be mentioned which may occur when the patient's disease is considered cured and an attempt is made to re-expand the lung:

(a) The frequent occurrence of pleurisy with effusion needing treatment,

(b) Traumatic empyema; the lung being injured by a needle as it approaches the chest wall,

(c) A late broncho-pleural fistula after years of effective collapse and apparent cure,

(d) Impossible re-expansion, which leads to further unexpected treatment.

These complications are so familiar that there is no need for me to illustrate with films. The patient and physician have both held somewhat of a false sense of security as to the ultimate termination of the case.



There are a number of conclusions to be drawn from these experiences. Among the more obvious are these:

1st. Artificial pneumothorax per se has been of no real value in the reduction of mortality from pulmonary tuberculosis, and ineffective pneumothorax should be abandoned.

2nd. Effective pneumothorax and pneumothorax made effective by intrapleural pneumonolysis will arrest the disease, even if bilateral in by far the majority of cases. Statistics already prove this, and as more specialists become proficient in doing pneumonolysis the favorable effect on mortality will be increasingly evident.

3rd. Pneumothorax only apparently effective may give a false sense of security. Such cases are frequently those in which a complete collapse is prevented by adhesions. In these cases, as well as in all pneumothorax cases, constant careful supervision is necessary throughout the years of treatment. Fluoroscopy is absolutely necessary before and after each refill, so that the physician may know that the proper degree of collapse is being maintained. If adhesions are present, they may be suspected of being a potential source of danger. They should be severed, if operation is possible. And, too, they should be severed early, for reasons which time does not allow me to discuss.

4th. Every type of chest surgery should be available to each patient who consents to be treated with artificial pneumothorax.

5th. Patients with effective pneumothorax should stay in the hospital, if possible, until the disease is considered apparently arrested, or until the physician is reasonably assured that no further type of collapse therapy is necessary to effect an ultimate cure.

Finally, when the time for re-expansion of a lung is at hand, it is advisable to hospitalize the patient again, in order to minimize the possibility of late complications, and so that some form of permanent collapse may be instituted, if found necessary.

I have attempted to give in this short paper a few of the reasons why artificial pneumothorax per se has not been proved an effective weapon in the treatment of tuberculosis. Conversely, I wish to state, in my experience, that effective pneumothorax is still the treatment of choice for the majority of individuals suffering from active pulmonary tuberculosis.

## TEMPOROMANDIBULAR JOINT IN RELATION TO EYE, EAR, NOSE, AND THROAT

J. KENNETH HUTCHERSON, M. D.

Louisville

In presenting this subject, it is done so in the hope it might add more stimulus to our desire to ferret out some of the disorders occurring mostly in the head and neck, namely; headaches, dizziness, vertigo, stuffiness in the ears with loss of hearing, burning sensation of the nose, mouth, and tongue; neuralgia, noises in the ear, and eczema of the external auditory canal. In delivering this before you tonight, for your consideration, I am cognizant of the fact I present nothing new. It is an old subject, but I am constrained to believe there are many men of the Medical and Dental profession who are not sufficiently acquainted with this chain of symptoms to properly evaluate the etiology. There are some of our most illustrious men in the Dental and Medical profession with wide experience and reputation, who believe there is little, if any, virtue in the repositioning of the mandible for the correction of temporomandibular joint pathology. I hold no brief with these men, but I am inclined to believe they are ill advised or unacquainted with this subject.

Some years ago it was somewhat of a fad to remove tonsils by the diathermy method. This procedure was in much disrepute, here in Louisville, and probably rightly so, because of the results obtained. I heard, one morning, the conversation between two otolaryngologists in the dressing room of one of the hospitals. One of them asked the other what he thought of the method of diathermy for the removal of tonsils and I was forcibly struck by his reply, "In my hands, it has been unsatisfactory. I have used it but do not like it. In the hands of those who know more about it, than I do, it may be all right." I wish a somewhat parallel attitude might exist among more members of both the Medical and Dental professions regarding the temporomandibular joint pathology. But with those who are acquainted with this particular phase of temporomandibular joint pathology are not easily discouraged by "a doubting Thomas."

If the otolaryngologist and ophthalmologist are not alert to the possibility of these symptoms, he will make a dismal failure

in relieving the discomfort of many cases that come to him. Any, if not all of the above symptoms, should be ruled out by a careful examination of the eyes, ears, nose, throat, sinuses, and teeth. Time will not permit me to go into the various phases of these examinations. A complete physical examination with laboratory work would never be amiss in any case, but one is not always able to get this.

It might be well to give briefly the anatomy of the temporomandibular joint. This drawing on the black board will help you to visualize and better understand just how the condyle of the mandible articulates in the glenoid fossa. The normal position with the mouth closed and the upper and lower teeth drawn tightly against one another, shows the anterior superior surface of the condyle resting against the inferior posterior surface of the articular eminence. The muscles and ligaments of mastication largely control the movements of the condyle in the glenoid fossa. With the loss of some of the back teeth, especially the molars, the "bite" is thrown out of balance. This condition, uncorrected over a period of months and years, will allow the muscles and ligaments of mastication to suffer from this maladjustment. Some of these muscles become taut, while others become relaxed. With this change in the musculature, the condyle is not held snugly and is allowed to wander. With this loss of proper support, the condyle head is pushed upward and backward through the act of chewing, into the glenoid fossa. This same condition may be brought about through improperly fitted artificial dentures, or where there is a decided "overbite," where the patient has all of his or her normal teeth, but they are either worn down or short.

The Chorda Tympani nerve emerges into the glenoid fossa and may receive injury from the "wandering condyle head." It contains both sensory and motor fibers. The auriculo-temporal nerve passes to the mesial side of the capsule and between the condyle and tympanic plate supplying the temporal region and the vertex. Insult to the structures in the glenoid fossa accounts for much of the pain in the vertex, the occiput, and behind the ear, simulating pains from the deep sinuses or eye strain.

The eustachian tube leading from the pharyngeal space to the middle ear is in contact with the muscles of mastication. Any departure from their normal state may

infringe on the eustachian tube. With the "overbite" and "malocclusion" the upper head of the external pterygoid muscle is loose and the soft tissue bunches against the eustachian tube. The tensor veli palatini muscle borders the tube anteriorly almost on a straight line, and its function is to open the tube during the act of swallowing. With a decided "overbite" and "malocclusion" the compressing effect on the tube prevents its opening during the act of swallowing. This disturbance of proper aeration of the eustachian tube and the intratympanic area accounts for loss of hearing, dizziness, and vertigo.

The pathology of the temporomandibular joint has appeared largely in the dental literature chiefly because the repositioning of the mandible and the correcting of the "bite" lay almost entirely within the dental profession. And may I add, it is my belief these cases should be handled only by those men who have a thorough knowledge of this work.

This is no reflection on the dentist who is not able to accurately reposition the mandible unless he is leaning heavily toward this particular phase of dentistry. I do not think it is any reflection on the ability of the ophthalmologist or otolaryngologist because he cannot, with ease and skill, remove a gall-bladder or do a hysterectomy, anymore than reflecting on the ability of the general surgeon because he cannot likewise, with skill and ease, do eye, nose, or ear surgery.

When I became interested in the temporomandibular joint pathology in 1934, I made it a point to send the patient back to his or her dentist whenever a mandibular joint disturbance was suspected, with the request that their dentist make an examination and give me a report if they thought this might account for the symptoms, which I had not been able to rule out by my routine examination. The result was that most of them came back with a negative report. I was no further along in my diagnosis and treatment than when I started. I then decided to insist on all who needed a temporomandibular joint examination to go to one of the men who had made a study of this particular phase of dentistry. Since then I have had some very gratifying results in those cases that proved to have temporomandibular joint pathology. I am indebted to Doctors Louis Block and Elam Harris for the results obtained in these cases.



## DISCUSSION

**Elam Harris, D. D. S.:** I feel I cannot add anything worthwhile to the splendid paper by Dr. Hutcherson but I do wish to say that I am not treating nor offering to treat eyes, ears, noses, nor throats. I am practicing dentistry only. There is a dental phase to the cases presented by Dr. Hutcherson. We do not wish to shirk our responsibility and where dental science enters into these cases that is our obligation because we are the only ones who can take care of them. It would be cowardly for us to shirk that responsibility. It is honorable to render proper service.

On one of the cases reported by Dr. Hutcherson this evening, I made one of the most outstanding failures I have ever made. As it was an outstanding failure it finally turned out to be an outstanding success. This lady had many good teeth but she had such a bite it was a mechanical impossibility to place an appliance on the teeth that would reduce the dislocation. After our failure with an appliance on her teeth we advised extraction of all teeth and making artificial dentures as the only means of securing and maintaining normal position of the lower jaw when in function. She did not consent to do this until she had been to many doctors seeking relief. When Dr. Jelsma examined her and advised her to see a dentist, she agreed to have the teeth extracted and dentures made. She is now a very happy woman. One might conclude that some pathology about the teeth extracted caused her trouble and the removal of these diseased teeth gave relief. It is not unreasonable to believe this, but the facts do not substantiate this conclusion. The facts are that when the patient removes her dentures, permitting the muscles to pull the jaw upward and backward producing a posterior dislocation of the condyles, her pain and discomfort return. When the dentures are put back into the mouth, she is relieved.

The problem in this case, as in all these cases, was to bring the condyle in normal position in the glenoid fossa, when teeth are functioning or closed in centric. If there are still some who are skeptical they only have to refer to texts on anatomy, to find that there is a definite position of the condyle in the glenoid fossa when the teeth are closed, that is normal. This normal position is defined in every text on anatomy. Dr. Hutcherson has shown what the normal position is. Any departure from normal obviously may cause trouble. The teeth alone hold the lower jaw in the normal position. If the teeth, because of abnormalities fail to do this, then it is the dentist's duty to make them do so.

I do want to stress again the anatomy that Dr. Hutcherson called attention to because that is the basis of our work. No case is taken until a thorough examination is made by a physician

and causes other than the teeth are ruled out.

If the anatomists tell us what is a normal joint, then we should be willing to abide by that. If teeth are lost, and the condyle wanders into the posterior part of the fossa, one should not be surprised if it causes trouble just as a dislocated joint in any part of the body may cause trouble. This dislocation may produce aseptic necrosis of the condyle. It may produce calcific deposit on top of the condyle and that condition will produce symptoms similar to a necrosis which are very painful.

**Louis S. Block, D. D. S.:** I should like to have the opportunity of removing the mystery from this field of temporo-mandibular joint correction. It is a characteristic fault of the Dental and Medical professions to tend to be overenthusiastic over new thoughts. For years many men in the Dental profession observed when new upper and lower dentures were inserted, that occasionally hearing was improved. This caused some to believe, and to be loud in their belief, that the dentist could cure all deafness. We found that it usually did not do so at all. Only those occasional cases of catharral deafness, which could be relieved by inflation of the eustachian tubes, actually showed any improvement.

Of interest to medical men and the anatomists is the explanation of why this occasional patient was cured or improved or felt better after this occlusal correction was made. There was increased tension on the muscles bordering and attached to the eustachian tube. There was increased tone of the tensor veli palatine muscles, so that when the patient swallowed he opened the eustachian tube and allowed proper passage of air through the tube. The eustachian tube, in case of dental over-closure, was compressed, and upon inflation of the tube the patient was relieved. Frequently by dental correction, the patients can be aided. That is but a small part of this field. Most patients presenting have referred neuralgia, tenderness over the temporo-mandibular joints, headaches in the region of the vertex and occiput, etc.

The first case Dr. Hutcherson discussed was very simple from a mechanical standpoint. Once the diagnosis was made, clinically, we verified it with radiographic findings. It was then simply a question of building up the back teeth higher than the front. Then as the patient attempted to bring her front teeth together, the high back teeth served as a fulcrum and the condyle of the mandible was pulled downward and into a proper position.

In these cases, it is necessary to increase the tone of the muscles. Putting something between the molar teeth causes the muscles to stretch more. This case was a little unusual because the patient had all of her own natural teeth. In most

cases at least some, if not all of the posterior teeth are missing.

**M. C. Baker:** We are very thankful that the dentists are becoming more and more conscious of the trouble that has been presented tonight. I am sure that every dentist who puts in an inlay or a filling of any sort tries to give the patient a perfect bite and I give them credit because practically all are marvelous mechanics. This is a specialty within a specialty. The dentists take particular interest in this particular trouble. The two dentists here tonight have been pioneers in this work in Louisville. I should like to give them a great deal of credit.

They study the temporo-mandibular joint under special x-ray technique, before and after dentures are placed. It is not guess work. A great many claims have been made as to relief and cures by repositioning the mandibular joint. The jury is still out in many of these, such as eczema of the auditory canals, defective hearing, tinnitus, burning tongue, etc. It will take a great many years of research to prove this out, especially as to deafness. I think audiometric readings will have to be taken repeatedly to tell the effect on deafness, but I do know that repositioning the temporo-mandibular joint is a great boom in relieving these cases of otalgia, cases of severe neuralgic pain in and around the ear. I have had twenty or thirty of these patients who had had pain for many years and at times unable to chew solid food. After repositioning of the joint these symptoms disappeared and they began to lead normal lives again. One patient had vertigo and presented symptoms of petit mal. On wearing proper splints, the condition gradually disappeared and now two years afterwards presents no further symptoms.

This study and mode of procedure have been a great boon to us doing ear, nose and throat work and it has been fine to cooperate with the dental men. The subject has a great future, but we don't want to lose our heads over it. The cases treated should be definitely proven as ones of mal-position of the temporo-mandibular joint.

I am sure you all have seen these cases of otalgia, having severe pain particularly on chewing and lying on the affected ear. If we can cure these cases alone we have made a great advance in medicine.

**J. Kenneth Hutcherson** (in closing): Not all the cases that have the bite opened find perfect relief. However, a large majority of my cases that I have been able to follow up, who have had this repositioning of the mandible when needed, have shown some degree of improvement, and as shown in some of these cases reported here tonight, the relief has been pronounced.

## A PHYSICIAN'S CONTRIBUTION TO RELIGION AND HUMAN SOCIETY

WILLIAM M. GRIESBAUM, J. C. L.

Assistant Chaplain,

S. S. Mary and Elizabeth Hospital

Louisville

When your esteemed President, Dr. M. C. Baker asked me to address you on this occasion, I deemed it a great honor and a distinct pleasure to be afforded this opportunity. He graciously allowed me a great latitude as to the choice of a subject. This naturally pleased me much, yet in his accustomed consideration of others, he suggested a limitation as to its length, and I am sure this thoughtfulness will please you as well.

Oftentimes you have heard an invited speaker on an occasion such as this and in your other gatherings extol the immeasurable benefits accruing to human society by men pursuing your noble profession in cooperation with the nursing profession and hospital managers. This is as it should be. The recounting of great achievements by others of your own kind acts as a stimulant to individual efforts in realizing high ideals and attainments.

Man, as he is constituted in the present order, has need of a physician. This statement hardly needs proof. It is almost a self-evident fact, moreover it is corroborated by the Word of God. "Honour the Physician for the need thou hast of him: for the Most High hath created him, and let him not depart from thee, for his works are necessary. For there is a time when thou must fall into their hands." (Ecclesiasticus. XXXVIII, 1-12,13).

How true. There is a time when we all must fall into their hands. It is the universal desire of man that when that time comes, he falls into skilled hands. And therein lies the basis of the trust and confidence which man places in you.

All men look upon you as sworn irrevocably to preserve life at whatever stage of human existence you come into contact with it in as far as it is humanly possible according to the designs of the Giver of all life.

Keeping this sacred trust ever in mind, it is evident that mediocrity should never have place in your professional work. The difference between the outstanding physi-



cian and the mediocre one is not so much a matter of natural ability as of mental industry. As in all other professional work the lack of knowledge which could be obtained is responsible for more failures than all other causes combined. In your excellent profession perseverance and the constant pursuit after knowledge as it is garnered day after day has proved itself a very satisfactory substitute for genius.

That man has need of a skilled physician, we all agree. Did you know, and I say it with all due reverence, that if God did not actually need a physician in the work of spreading His Gospel, he at least employed the services of one to great advantage, to the advancement of His own glory and the good of religion and mankind for all times? I refer to the Antiochian, Luke "the most dear physician" as St. Paul calls him (Col. IV, 14). The medical language and terms of the Third Gospel and the Acts of the Apostles of which he is the author prove that he was a physician. It is pointed out that the prologue of his Gospel (Luke I, 1-3) bears a striking resemblance to that of Hippocrates and of the physician Dioscorides who wrote his work, "De Materia Medica," as you know, probably about the time of the Emperor Nero.

The Third Gospel alone contains the account of the "surgical miracle," as it is called (Luke XXII, 51), and it alone has preserved the saying: "Physician, heal thyself" (Luke IV, 23). Throughout his Gospel and the Acts, we find his language very largely impregnated with technical medical words—words, none but a trained physician would have thought of using; words, too, employed in the general story in the course of the description of events not connected with the healing of a disease or any medical subject; the very words, in fact, which were common in the phraseology of the Greek medical schools, and which a physician, from his medical training and habits would be likely to employ. Thus to cite but one example, when he was with St. Paul on their voyage to Rome and suffered shipwreck, we find him using a medical term to describe the action of the seaman in frapping the vessel to keep it from splitting apart. (Acts XXVII, 17).

Had not God employed the services of this learned physician, we would not have known the intimate details concerning the birth of Christ. Mark does not

mention it; John presents it in mystical language and disposes of it in one verse: "And the Word was made flesh, and dwelt among us" (John I, 14). Matthew mentions the birth and gives us the account of the coming of the Magi Kings (Matt. II, 1-12), but Luke, the physician, gives us the complete story, even to the detail of the Child being wrapped in swaddling clothes (Luke II, 7). He alone gives us the message of the Angels: "Glory to God in the highest and on earth Peace to men of Good Will." (Luke II, 14).

Religion and Society are indeed indebted to Luke, the physician, for he himself became from a physician of the body, a physician of the soul, and as often as his book is read in the Church, so often does his medicine flow out sending its eternal healing qualities into the souls of men.

Since we are so near to the beginning of a new year, and as all men of good will strive to correct past failures and look forward to greater and better accomplishments in the future, allow me to suggest that you take Luke, the most dear physician as your inspiration and by keeping him in mind, be true to the ethics and ideals of your profession. Be like Luke "diligently attending to all things" (Luke I, 3), and treating every patient as a "Theophilus," namely, "one who is loved by God." You too then will merit in God's own time the salutation: "most dear physicians of the staff of S. S. Mary and Elizabeth Hospital."

My final word is for the ladies. They frequently like to have the last words anyway. I want you to know that Luke did not forget the women either. He was very considerate of them. His Gospel is sometimes referred to as the Gospel of Women, and rightly so. To him we owe the many beautiful pen pictures of the Blessed Lady, of Elizabeth, Anna, Mary Magdalen, Martha and others. See that your husbands have the same regard for you as Luke the physician had for all women in general. When things do not go along as well as they should, you will have another argument to prove your point. Tell them Luke did not act that way. You can be a great help to your husbands in realizing their great ideals by assisting them in their work. And I know you are.

In closing, let me assure you, dear physicians, that the Sisters and the Nurses pledge anew their loyal cooperation for the coming year. As evidence of the re-

gard and esteem they have for you, they will on January 1st lift up their prayers to the throne of God as they join me in offering the Holy Sacrifice of the Mass for the Physicians of the Staff and their loved ones. God bless you all.

### SEQUELAE OF CHILDBIRTH

DAVID M. COX, M. D.

Louisville

Much has been done about prenatal care and rightly so, very little comparatively speaking, has appeared in the literature concerning postnatal care.

I feel that each person who does obstetrics should feel that it is his duty to exert every effort to preserve the health of all mothers. The ideal is for the mother to feel as good after having had a baby as she did before.

This talk is somewhat elementary, however, it is the simple things that we overlook unless they are repeated many times. My interest in post-natal care and sequela of childbirth has lead me to make a survey of 202 cases that I have delivered and have been able to follow for at least one year after birth.

Not meaning to set up my method as the best or only method but to show you what these women were asked to do. I would like to cite one case and go through a year's time and take the things that might happen to her and how these problems were handled.

Mrs. A. goes to the hospital for delivery. Measurements of her bony pelvis have been taken and recorded in early pregnancy and have been deemed normal. The position of the presenting part is determined as soon as possible. The cervix must be fully dilated before any delivery is attempted. When the cervix is dilated, many times the mother is so worn out that she cannot cause expulsion of the fetus. Each case must be evaluated at the time. If the head comes down and rests on the perineum the muscles will stretch and maybe tear if the delivery is too fast or if the head is too big. So it has been my custom to do an episiotomy on a large percentage of patients unless the perineum is already relaxed or there is a very small baby. If delivery is not fairly rapid, forceps are applied and the head lifted over the perineum.

The episiotomy wound is repaired with

number two twenty day chromic cat-gut, using interrupted sutures for the muscle and fascia and a continuous suture for the mucosa and skin.

At the end of ten days Mrs. A. is ready to go home. She has been instructed to stay in bed for ten days after she gets home except she may be up to eat, go to the laboratory and maybe take care of her baby. She has been told to do knee chest position for five minutes twice a day and why she should do it. She is also told that it is useless, unless the labia are separated and air is allowed to go into the vagina ballooning it up thus causing the uterus to fall anteriorly. She is given a printed list of exercises to stimulate the use of her relaxed and stretched abdominal muscles and to improve her posture. She is encouraged to observe herself in profile in the mirror and thus become posture conscious. This reduces sway backness and lower abdominal prominence.

When the baby is three or four weeks old she may begin to increase her exercise and duties gradually. She may begin to take douches if she desires.

At six weeks she comes to the office for examination. The condition of the perineum and cervix are determined. If there is an erosion of the cervix it is cauterized and she is told that her vaginal discharge will be increased from ten to fourteen days due to sloughing of the cauterized tissue. The position of the uterus is also determined. If it is posterior a pessary is inserted and she is advised to continue her knee chest position as previously for one week, then she is examined again to see if the pessary is holding the uterus anterior. If it is, she is told to wear the support for two months, when it is removed. One month later she comes back so that I may determine if the uterus has remained in anterior position.

If no pessary has been used, patients are examined at six weeks, three months, six months and one year.

The following is Statistical Survey of 96 Primipara and 106 Multipara.

#### PRIMIPARA

58 LOA position.  
23 ROP position.  
7 Breech.  
1 Brow.  
1 Rot.  
6 LOT.  
66 Forceps.  
89 Episiotomies.  
5 Lacerations.



- 91 Marital vaginal outlets at 6 weeks examination.
- 5 Relaxed vaginal outlets at 6 weeks examination.
- 58 Normal cervixes at every examination.
- 38 Eroded cervixes at one examination.
- 38 Cervixes cauterized (All good results.)
- 58 Uteri normal position.
- 38 Uteri, posterior position.
- 38 Pessories were used.
- 30 Good results after use of pessory.
- 8 Poor results after use of pessory.
- 73 Abdominal muscles good tone.
- 12 Abdominal muscles fair tone.
- 11 Abdominal muscles poor tone.

#### MULTIPARA

- 77 LOA position.
- 20 ROP Position.
- 3 Breech.
- 1 ROT.
- 1 ROA.
- 3 LOT.
- 23 Forceps.
- 58 Episiotomies.
- 3 Second degree lacerations.
- 7 First degree lacerations.
- 80 Marital vaginal outlets at 6 weeks examination.
- 26 Relaxed vaginal outlets at 6 weeks examination.
- 63 Normal cervixes at every examination.
- 43 Eroded cervixes at one examination.
- 43 Cervixes cauterized. (all good results.)
- 56 Uteri—anterior.
- 50 Uteri—posterior.
- 50 Pessories used.
- 35 Good results after use of pessory.
- 15 Poor results after use of pessory.
- 60 Abdominal muscles good tone.
- 14 Abdominal muscles fair tone.
- 32 Abdominal muscles poor tone.

#### DISCUSSION

**H. M. Rubel:** This very excellent paper by Dr. Cox, I feel sure, was enjoyed by every one doing Obstetrics. His unbiased results show a large type of obstetrical service rendered his patients. On our service here at the City Hospital Episiotomies are done in a routine manner in the greater number of deliveries. We usually employ a medio-lateral incision, either right or left, in the hope of protecting the perineum from unusual trauma. The size of the episiotomy usually should not be too large as when the head is finally brought down over the perineum, an extension of the episiotomy incision results and occasionally quite a large opening obtains. In fact we have seen episiotomies that cause us to be greatly chagrined. These large and extensive episiotomies may heal by first intention but, at

times, due to the lochial discharges over a period of many days occasionally break down and then a long period of healing results, with indifferent success. We have had some episiotomies which we were not very proud to look at for quite a length of time. I think Dr. Cox was quite modest in his use of forceps. We resort to forceps application when the head is on the perineum, and the patient is unable to advance the head, after a moderate lapse of time. I do not believe we gain any thing whatsoever by allowing our patient to pound the baby's head on the perineum in the hopes that she will deliver the baby by her own efforts. Deepen your anaesthesia, do a medio-lateral episiotomy, and then if the head still remains on the perineum, do a low forceps application. You conserve your patients strength and energy, and save the baby much needless trauma caused by repeated uterine contractions expended upon the child as a whole, and on the child's head in particular, as it pounds on the perineum demanding expulsion. After your final check up, on the tenth day, before dismissing your patient, you quite naturally find a laceration, and probably an erosion of the cervix. And, you usually find them providing you look for them. Tell your patient to return, after her sixth week, as you wish to check on your results. For lacerations and erosions of the cervix we usually resort to the cautery. One, two or three treatments may be necessary. I usually use a 5% novocaine solution for topical application before cauterization. Be sure and guard your patient against burning of the non-involved tissue. In your early work this may happen.

Regarding instructions given to your patient upon returning home I think is quite important. She should take good care of herself for the following two weeks. Rest in bed for the first week is ideal if same can be carried out. Usually the patient thinks she must be up and about taking care of her child, otherwise she is lax in her duty. If our patient could employ a good practical nurse at this time of her post partum state I think a lot of our patients would come through this part of her convalescence feeling stronger and better able to again resume her normal duties. Exercises, particularly the knee chest posture, given twice daily, with the knees spread apart for 12 inches, will give your patient a feeling of comfort. Some men do not believe it ever did any good. I still advise this procedure. Postural exercises as advocated by Dr. Cox, if carried out by the patient, is a very good plan, and will restore muscle tone quicker than any other known plan. I am still advocating the wearing of some form of abdominal support following pregnancy. I believe, in spite of rigid rules given our patients regarding exercises, that few of our girls carry out these instructions, and a well fitting corset, or girdle, gives one a

great sense of comfort, relief and well being, until the abdominal muscles regain their normal tone and resilience which months of over distention have caused them to lose. I wish to again thank Dr. Cox for his splendid resume of his cases, and the sane and sensible handling of the many details which naturally arise during the neglected period of post partum care.

**Rudy Vogt:** I should like to say a few words about retro-displacements. They are easier to correct at the usual 6 weeks post partum examination. We see a great many retro-displacements in the clinics at the City Hospital. We see some patients who do not have symptoms. If they are present and allowed to persist, the symptoms grow progressively worse. The resulting congestion causes increased pain and large varicosities. Congestion causes cystic degeneration in the ovaries. Endometrosis may result from persistent retro displacements. If corrected at the six weeks interval it is a valuable aid and patients should be informed of the importance of these examinations following delivery.

**David M. Cox** (in closing): I might say that if the cautery is used soon after delivery, the erosions do not need deep cauterization. I have not found it necessary to use novocaine.

When episiotomies are done they are usually lateral, occasionally in the midline, but not very often.

Dr. Rubel brought out that the hospital beds do not meet the demand for the number of patients. I feel that we have to move them out so that other patients can have attention.

Regarding the abdominal support, I tell my patients they can wear any type of girdle while they are pregnant, but not wear any for at least 6 months after delivery. Otherwise, it would be useless to give the exercises. After that they can wear them if they so desire. All these corrections are much easier soon after delivery than they are many months after delivery.

### BOOK REVIEW

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1940. Cloth. Price \$1.00. Pp. 181. Chicago: American Medical Association, 1941.

There are a number of interesting reports in the "non-acceptable" category. The one on the widely exploited Neurosine of the Dios Company sounds a timely warning on the hazards of bromidism and uncontrolled hypnotic medication. The report rejecting a number of preparations of gonadotropic hormone from the serum of pregnant mares, together with the report rejecting certain ovarian and ovarian anterior pituitary preparations, attest the Council's continued critical interest in the field of endocrinology. This

is also indicated in the report on Desoxycorticosterone, written by Doctor Edgar S. Gordon and adopted by the Council for publication with a statement of the Council's attitude on the present status of adrenal cortex. The Council finds adrenal cortex therapy now is an unsatisfactory and unsettled state.

Noteworthy preliminary reports are on Guanidine Hydrochloride-Calco, which has been proposed for use in the treatment of myasthenia gravis, and Acetylglycarsenobenzene, a new anti-syphilitic for intramuscular use, which the Council feels should be further perfected.

Among the nomenclature reports are those designating "Pyridoxine" and Pyridoxine Hydrochloride for Vitamin B<sub>6</sub> and Vitamin B<sub>6</sub> Hydrochloride; "Sulfathiazole" for 2-Sulfanilamidothiazole and "Sulfamethylthiazole" for 2-Sulfanilamido-4-Methylthiazole. Preliminary reports on these drugs as well as Phenothiazine and Histaminase are included.

It is difficult to choose any among the so-called status reports for special mention—all are noteworthy for one reason or another. The report on the present status of the injection treatment of hernia is a continuation of the Council's consideration of this question. The Council has reached the decision that it is necessary to condemn the exploitation of the injection treatment of hernia by manufacturers of solutions.

Another status report that must be mentioned is that on Lipocaic, a new pancreatic hormone concerned in some way with the normal transport and utilization of fat. The Council awaits development of further clinical evidence for Lipocaic and expressed the opinion that the method should not be recognized for routine practice.

Mention must be made of the excellent report on organic mercurial compounds as bactericidal agents, which states the Council's conclusion that no organic mercurial compound has yet been offered that will guarantee the destruction of spores under all conditions.

Another valuable report is that on the promiscuous use of the barbiturates. This is a continuation of a previous study of the use of barbiturates in suicide. The present study is an analysis of hospital data.

One cannot even glance through a volume such as this without reflection on the great value of the Council on Pharmacy and Chemistry's work, which so richly deserves the support of all who are interested either directly or indirectly in the progress of medicine.

Two reports relegate to the therapeutic scrap heap, the drugs Isacen and Melubrin: Isacen was accepted in 1926 as a non-toxic laxative or purgative; Melubrin is an antipyretic which seemed to have promise when it was accepted in 1913 but which the manufacturer has now ceased marketing.



Kentucky Medical Journal

Published Monthly By  
THE KENTUCKY MEDICAL ASSOCIATION  
Incorporated

Entered as second class matter October 22, 1906, at  
the Postoffice at Bowling Green, Ky., under act of  
Congress, March 8, 1879

Subscription Price .....\$5.00  
Edited Under the Supervision of the Council

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NEXT MEETING MURRAY

COUNTY SOCIETY REPORTS

**Hopkins:** The Hopkins County Medical Society held its regular monthly meeting at the hospital November 13. The local dentists and pharmacists were guests, and their participation in activities of the Society is planned for the future.

Representatives of the Farm Security Administration discussed a proposal to facilitate medical care for properly authorized indigent farm families. This proposal was tabled after discussion, in which it was pointed out that under the existing medical organization in Hopkins County these people are already being cared for.

The Society also considered the problem of the State Income Tax, and a motion was passed that a resolution be adopted heartily condemning a continuance of this tax. The Society feels that it is decidedly unpatriotic to continue assessing large sums for State projects in view of the national defense needs.

An invitation to attend the showing of a picture on Adrenal Cortical Extract at the Veterans Hospital, Outwood, was accepted.

The program consisted of examination of a case of Situs Transversus.

Those present were: Drs. A. W. Davis, T. R. Finley, R. H. Benson, M. S. Veal, F. A. Scott, W. H. Garnier, J. E. Haynes, C. R. Morton, W. L. Morse, W. C. Tippet, W. L. Moore, A. F. Finley, J. D. Sory, J. E. Taylor, I. J. Townes, J. R. Corum, W. F. Stucky, and B. C. McEuen, dentist. Pharmacists present were M. E. Pate, J. B. Moore, and J. W. Hatchel.

WM. H. GARNIER, Secretary.

**Jefferson:** The 835th stated meeting of the Jefferson County Medical Society was held Monday evening, November 3, with 87 members and guests present. The President called the meeting to order at 8:05 P. M.

The Secretary read the minutes of the previous meeting and they were approved as read.

The Secretary read a letter from Dr. Marshall G. Seibel of St. Louis calling attention to the Alumni Dinner, of the U. of L. Medical School, on Wednesday evening, November 12, at the Jefferson Hotel in St. Louis. All Alumni who are in St. Louis to attend the meeting of the Southern Medical Association (Nov. 11-14) were invited to attend this dinner.

The Secretary read a letter from the A. M. A. calling attention to the Seventeenth Edition of the A. M. A. Directory which is now under way, and requesting that proof of data published in the last edition be corrected and returned in order to bring listing up to date. The prepublication price for the Directory is \$15 (the regular price is \$18).

The Secretary read a letter from Dr. Fred L. Adair, Chairman, inviting the members of this

Society to attend the Second American Congress on Obstetrics and Gynecology which will take place in St. Louis, April 6 to 10, 1942. General practitioners as well as those limiting their practice to the specialties are welcome to attend.

The Secretary read five applications for employment which will be posted on the bulletin board.

The Secretary re-read the Proposed Amendment to By-Laws, Chapter XVII, Credit and Rating Bureau, Section 7. Motion was made, seconded, and passed for its adoption.

With the members standing, R. A. Bate, Committee on Necrology, read that Committee's resolutions on the death of Dr. John A. Neblett. Motion was made, seconded and passed that a copy be spread in the minutes, one sent to the family and one to the brother, a member of this Society. Dr. Bate also read the Committee's resolutions on the death of Dr. George A. Hendon. It was moved, seconded and passed that a copy be placed in the minutes, one sent to the family and one to the son.

Herbert Wald was elected to membership in the Society.

The President introduced Mr. W. F. Johnston of the Courier-Journal Advertising Department. Mr. Johnston spoke of Mr. Barry Bingham's efforts to publicize the Sesqui-Centennial Anniversary of Kentucky with a special illustrated booklet which will be part of the Courier Journal for January 1, 1942. No funds have been appropriated but advertising space will be sold and this Society is asked to subscribe for some space. The rates are \$1180 for a full page; \$635 for ½ page; \$325 for ¼ page and \$165 for ⅛ page.

Lee Heflin asked if it were necessary to act on it tonight.

Virgil Simpson moved that it be referred to the Executive Committee for report at the next meeting. Seconded and passed.

W. B. Troutman asked if this committee had power to act on it.

The next meeting is a dinner meeting at the Brown Hotel with no business session scheduled but since the deadline for copy is December 1, this will be made a special order of business.

The Secretary read a proposed amendment to Section 7, Chapter 2, of the Constitution which was submitted by Oscar Bloch, and which is as follows: "Election of Officers: Officers shall be elected at the Annual Meeting of the Society. Nominations shall be made at the Annual Meeting, any member in good standing having the privilege and right to make nominations."

The President announced it will be voted upon at the first meeting in December, and urged all the members to think about it and have a good attendance at that meeting.

#### SCIENTIFIC PROGRAM: 8:35 P. M.

"Massive Doses of Kaolin in Therapy of Peptic Ulcers." by Harry S. Frazier.

Discussed by Doctors J. Garland Sherrill and F. G. Speidel, with closing remarks by Dr. Frazier.

Intrapleural Pneumolysis. Paul A. Turner.

Discussed by L. W. Nehil, E. R. Gernert and Maurice G. Buckles with closing remarks by Dr. Turner.

The President announced that there were three applications for membership which were to have been submitted for vote at the June 2 meeting which was not held because there was no quorum. They were approved by the Judicial Council and membership dues were accepted; the names were submitted for official approval. The names of Doctors Fred C. Dye, George F. McAuliffe and Wm. H. Rosenblatt were read and elected to membership.

Film—"Post-Encephalitis Parkinsonism." Mr. F. E. Schmidt, of the Lederle Laboratories.

Adjourned: 9:55 P. M.

W. B. SMOCK, Secretary.

**Madison:** The regular meeting of the Madison County Medical Society was held October 16 at the Trachoma Hospital with Dr. Wilson Dodd president, presiding.

Members present were: Drs. Wilson Dodd, Kenneth Wright, Robert Sory, Shelby Carr, J. W. Armstrong, Ruby Payne, Hugh Mahaffey, Albert Cornelius, A. D. Farris and Max E. Blue.

The annual dinner meeting was discussed. The date to be December 18th. A motion by Dr. Mahaffey, seconded by Dr. Farris was passed that Dr. C. C. Howard of Glasgow be invited as guest speaker. Dr. Burr Atkinson was named as second choice for speaker.

Committee on annual meeting appointed consisting of Drs. Carr, Dodd and Sory.

Drs. Armstrong, Blue and Sory gave short reports on the State meeting.

Dr. C. B. Marcum of Berea died at his home September 30th, 1941.

ROBERT L. RICE,  
Secretary

**Union County Medico-Dental Society:** The Annual District Meeting of the Union County Medico-Dental Society was held at Sturgis, Thursday, November 13, 1941. A motion picture entitled, "Men of Medicine" was shown through the courtesy of Dr. Darrel Vaughn. An excellent meal was served by the ladies of the Methodist Church in the E. M. B. A. building which was furnished through the courtesy of Mr. Landers J. Chisholm.

Rev. J. Miller Cook, Pastor of the Presbyterian Church at Sturgis, Ky., said the blessing, follow-



ing which each person in attendance introduced himself.

Following the meal, Mayor E. C. Calman of Sturgis, gave the society and its guests a welcome to Sturgis. The Honorable Victor Spalding of Uniontown, Ky., heartily welcomed the group to Union County, stating that there is no better County than Union in the whole world. Dr. D. M. Griffith of Owensboro, Councilor of the Second District, gave an excellent impromptu response to this welcome.

Dr. J. W. Conway, President of the Union County Medico-Dental Society then introduced Dr. E. C. Hume of Louisville, one of the outstanding oral surgeons. Dr. Hume presented an interesting and very instructive lantern slide lecture on the surgical conditions of the mouth and jaw. The lecture was especially interesting because of the many experiences which Dr. Hume presented from his wide contact with conditions of this kind in his own practice.

The paper was discussed by several of the physicians and dentists present, many of whom came from Evansville, Ind., Owensboro, Ky., Paducah, Ky., and other points in Western Kentucky and Southern Indiana.

Dr. Bruce Underwood, Secretary of the Union County Medico-Dental Society, expressed appreciation to all who had had a part in the meeting, to the speakers and to Mr. Chisholm for the use of the building. Dr. Underwood also read a letter from E. L. Henderson, President of the Kentucky Medical Association, A. T. McCormack, State Health Commissioner, P. E. Blackerby, Assistant State Health Commissioner and V. A. Stilley, Councilor of the First District and from several others who expressed their regrets at not being able to be present at the meeting because of sickness and because of attendance of the Southern Medical Association meeting in St. Louis. The meeting adjourned at 10 o'clock following a very delightful evening and amid many expressions of a desire for closer cooperation between Dentists and Physicians and statements that Dentists and Physicians should both belong to the same profession.

BRUCE UNDERWOOD, Secretary

**Warren-Edmonson:** The Warren-Edmonson Medical Society held a dinner meeting at the Helm Hotel, Thursday night, November 6th. Papers were read by Dr. Marion F. Beard of Louisville, on "The Hemorrhagic Diathesis" and by Dr. McDaniel Ewing, also of Louisville, on "Newer Applications of Orthopedic Surgery," after which a general discussion was held.

W. O. CARSON, Secretary.

## NEWS ITEMS

Dr. and Mrs. A. T. McCormack, Louisville, were luncheon guests November 3rd of a group of Latin American and Canadian delegates to the recently ended conference of military surgeons. The luncheon was at the Brown Hotel. The group had been on a tour of the Bluegrass Sunday with the McCormack's and had luncheon at the Governor's mansion in Frankfort.

**Urology Award:** The American Urological Association offers an annual award not to exceed \$500.00 for an essay (or essays) on the result of some specific clinical or laboratory research in Urology. The amount of the prize is based on the merits of the work presented, and if the committee on Scientific Research deem none of the offerings worthy, no award will be made. Competitors shall be limited to residents in urology in recognized hospitals and to urologists who have been in such specific practice for not more than five years.

Essays shall be in the hands of the Secretary, Dr. Clyde L. Deming, 789 Howard Avenue, New Haven, Conn., on or before April 1, 1942.

Charles Hugh Maguire, M. D., announces the opening of an office, Heyburn Building, Louisville, practice limited to Surgery.

Hours 1 to 3 and by appointment; Jackson 7316, Highland 2625.

Harry S. Andrews, M. D., 910 Brown Building Louisville, announces the association of Carl L. Wheeler, M. D., practice limited to diseases of infants and children.

Dr. Hugh L. Houston, Dr. Hal E. Houston, Dr. Coleman J. McDevitt, announce the association with them of Dr. Robert W. Hahs at the Keys-Houston Clinic-Hospital, Murray, Kentucky, Specialty Internal Medicine and Pediatrics.

Dr. Walker L. Stumbo, surgeon-politician, died of a heart ailment nine days after he staged a political comeback by being elected Sheriff of Floyd County. Stumbo, twice elected county judge, and a stormy figure in Floyd Democratic politics for more than a decade, became ill after performing an operation at the Beaver Valley Hospital, one of two he owned and operated. Through his medical practice, he became widely known in the county and, entering politics, he first was elected to the county judgeship in 1929, an office to which he was reelected in 1934. In 1918 Stumbo and his brother, Dr. Ed Strumbo, established the Beaver Valley Hospital at Martin, which has many miners among its patients.

Kentucky doctors have a way of assuming leadership wherever and whenever members of the medical profession assemble. At the annual meeting of the Southern Medical Association in November, Dr. W. O. Johnson, Louisville, was elected Chairman of the Section on Gynecology. At its recent meeting in Louisville, the Association of Military Surgeons elected Dr. Irvin Abell, Louisville, fifth Vice-president, and Colonel Edgar E. Hume, Medical Corps, U. S. Army, son of the late Dr. E. E. Hume, Frankfort, and nephew of the late Dr. John C. South, Frankfort, was elected Third Vice-President.

Dr. Clifton Morris Fischbach, director of venereal disease control for Louisville, has been appointed the full-time director of the venereal disease clinic of Nashville, Tenn. Dr. Fischbach is a native of Louisville and a graduate of the University of Louisville in 1937. He is expected to assume his new duties about November 15.

Dr. A. J. Pauli, formerly located at 444 E. Oak Street, has left for duty with the Great Lakes Training Station.

#### BOOK REVIEWS

**CLINICAL IMMUNOLOGY, BIOTHERMY AND CHEMOTHERAPY IN THE DIAGNOSIS, PREVENTION AND TREATMENT OF DISEASE.** John A. Kolmer and Louis Tuft. W. B. Saunders Company, Philadelphia. Illustrated. 941 pages. \$10.00. 1941.

This is a volume that would render excellent service in the office library of every physician. It is to be remembered that from 40 to 50 percent of all the diseases of man are caused by organisms of either animal or vegetable origin. These organisms enter the human body from the outside and cause infectious diseases. The sum total of human knowledge is being added to and is changing more rapidly in connection with infectious diseases than any other diseases occurring in man. The contents of this volume cover all these diseases, whether bacterial, virus, rickettsial, protozoan, or fungus in origin. It contains a summary of the very latest and most reliable information emanating from research sources. The information which it contains is completely informative, yet thoroughly clinical and practical.

The contents of the book are divided into two parts. Part I deals with the mechanism of infection; that is, how the offending agent enters the body and how it produces diseases once it has gained entrance. The matter of immunity is discussed in all its phases; that is, whether a particular agent will produce an immunity; whether such an immunity is a so-called natural immunity and how this type of immunity is developed; whether a lasting immunity may be acquired by

the actual invasion of the body by the agent producing clinically recognizable disease; or whether active immunity may be conferred by the use of an antigen, in the form of a vaccine or toxin, prepared from the agent itself. It goes further and discusses whether an antitoxin or an antibacterial serum is of value in the treatment of the disease produced by a particular agent and whether there is a specific or near specific chemotherapeutic agent which may be used in the treatment of the disease.

Part II deals with the practical application of antigens, of serums, and of chemotherapeutic agents in the treatment of various infections. It gives in practical detail the technique of administration of these agents and the mechanism by which they counteract the infection.

This book is a volume which will aid the practicing physician in determining the infectious condition from which his patient may be suffering, in answering the questions which invariably arise about how the organism got to the patient, how disease was produced, the tissues invaded, and the immunological mechanism in the body that counteracts the infection. It further answers for the physician the question of what agents, either biological or chemical, are available for the treatment or prevention of the disease in question.

**NEW AND NONOFFICIAL REMEDIES, 1941,** containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1941. Cloth. Price, postpaid, \$1.50. Pp. 691—LXX Chicago: American Medical Association, 1941.

New and Nonofficial Remedies is the book in which are described the medicinal preparations found by the Council on Pharmacy and Chemistry to be acceptable for the use of physicians. The book is cumulative; each year there are added the descriptions of products accepted during the foregoing year. Those taken off the market or found no longer worthy of continued acceptance are deleted. The book is at that time also revised to bring it up to date with the most recent medical thought.

This year's new additions include the new sulfanilamide derivative, sulfathiazole, as well as sulfapyridine sodium; antipneumococcal rabbit serum of types I, II, III, V, VII, and VIII; human convalescent measles serum and human convalescent scarlet fever serum; and staphylococcus antitoxin. The field of endocrinology is represented by the addition of chorionic gonadotropin (follutein). The addition of shark liver oil reflects the search for new sources of vitamins A and D caused by the cutting off of foreign cod liver oil. Other newly accepted preparations are ampules of camphor, digilamid and magnesium trisilicate.



# KENTUCKY MEDICAL JOURNAL

PUBLISHED MONTHLY

BY THE

KENTUCKY STATE MEDICAL ASSOCIATION  
INCORPORATED

---

EDITED BY

ARTHUR T. McCORMACK, M. D., A. B., DR. P. H.  
UNDER THE SUPERVISION OF THE COUNCIL

---

VOLUME XXXIX

JANUARY TO DECEMBER, INCLUSIVE, 1941

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LOUISVILLE, KENTUCKY  
1941

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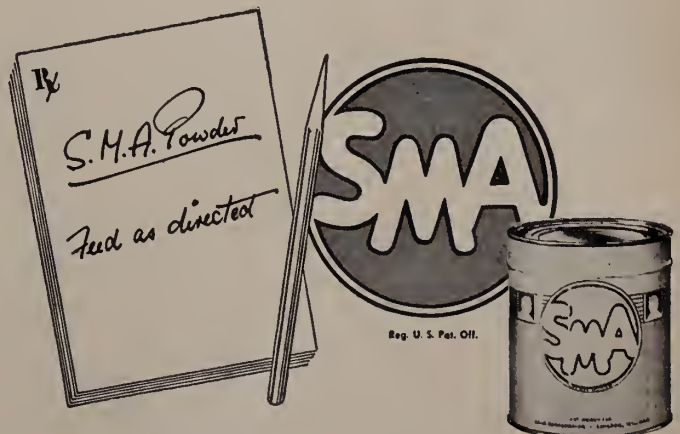
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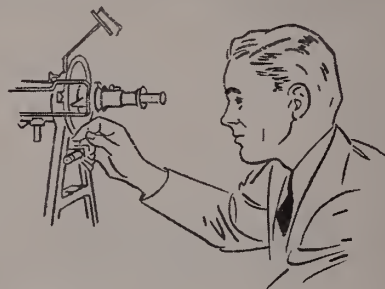
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KENTUCKY MEDICAL JOURNAL—PART II  
WOMAN'S AUXILIARY SECTION

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JANUARY, 1941

# HAPPY NEW YEAR --- AUXILIARY MEMBERS

## PRESIDENT'S NEW YEAR LETTER

My dear Auxiliary Friends:

As we stand on the threshold of a New Year I am very happy to feel that our Auxiliary year is well started. You, by your loyal co-operation and your enthusiastic efforts, have given me this happiness. May you, in turn, be blessed with happiness and peace throughout the year.



**Mrs. John Marcus Blades, Butler, President**

It was a joy to see some of you again at our Luncheon and Board Meeting in Louisville in November. The Southern Auxiliary Convention, with its charming President, Mrs. Charles P. Corn, in charge, was a tonic for Kentucky Auxiliary souls. We were glad to have Dr. McCormack, Dr. Bell, Mrs. Corn and Mrs. Holcombe attend our luncheon and bring to us messages of interest and inspiration. Dr. Austin Bell, President of the Kentucky Medical Association, in a very sympathetic and appreciative manner outlined several worthy objectives for our Auxiliary: a crusade against quacks and ignorance; participation in drives against cancer, malaria and smallpox; spreading of a gospel of good obstetrics; dissemination of knowledge to protect childhood; safeguarding children with capable and efficient teachers; discouraging the use of tobacco and alcohol so as to prevent many mental patients; freeing Kentucky Institutions from political practices, not on a scientific basis and preventing the sweeping aside of the close

"patient physician" relationship by State medicine. Some of these objectives are included in our Achievement Project.

We are fortunate to have for our organization Chairman, Mrs. John B. Floyd, who has been able to personally contact the wives of doctors in several unorganized counties. I feel confident that she will soon have several new Auxiliary units to add to our number. Let us assist her if we can. Mrs. Russell E. Kinsey has announced that Doctor's Day will occur on May 30th, in honor of the "Country Doctor." I cannot here mention all of our chairmen, but each one is busy and each one needs our support. It gives me a comfortable feeling of security for the Auxiliary to the Kentucky Medical Association when I think of our fine group of capable County Auxiliary Presidents and Committee Chairmen. I have no fears for the outcome of our year's work when I realize that I have the co-operation and confidence of such a splendid, enthusiastic and energetic group of women.

With best wishes for a very happy new year to each and every one, I am

Devotedly yours,  
(Mrs. John M.) Anna Blades.

## A WISH FOR THE NEW YEAR

By Reba Burrow Flynn, Frankfort

THAT GOD may smile upon you in your little shrine each day,  
That friends may know and love you, as one who's passed your way;  
That spring may bring the tulips and the hyacinths 'round your door,  
The orioles to sing again, as once they sang before.  
May summer's skies be mostly blue, with bright stars overhead,  
The rainfall bring you peacefulness, and rainbows at the end;  
And autumn leaves—when they must fall—shall make a cushioned bed  
Of brown and golden colors where your gentle feet may tread.  
May winter winds blow softly, your hearth be warmed with cheer;  
The snowbirds find your haven and chant their litanies there.

\* \* \*

And if He hears my prayer tonight (my heart tells me He will),  
O God, then send a messenger to a nomad's lonely hill,  
To tell me if she's happy as the days shall pass along . . .  
And perhaps—I'll sing at twilight—that broken vesper song.



# KENTUCKY MEDICAL JOURNAL—PART II

## WOMAN'S AUXILIARY SECTION

Published Quarterly Under the Supervision of the Advisory Council

Vol. X, No. 1

Bowling Green, Kentucky

January, 1941

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### NOTICE

Mrs. John M. Blades, State President, announces the Executive Board will meet at Covington on Friday, April 25, 1941. Save this date, County Presidents, State Officers and Chairmen, for a beautiful Spring drive and a helpful, congenial get-together.

### COME TO THE STYLE SHOW

#### A Letter From the Chairman

My dear:

Happy New Year! I know that all of you members of the Auxiliary are just getting your breath after the Christmas rush and a busy holiday season. I hope it was very happy!

If the mailman should bring you an invitation for a very special party—say about ten weeks from now—wouldn't you, like me, say, "Oh, I haven't a thing to wear?" This need not happen, because on Tuesday, March 11, the Kentucky State Medical Auxiliary will present a Style Show in the Crystal Ball Room of the Brown Hotel, Louisville.

Du Rand's will show us the latest models for all occasions—sports, afternoon and evening. Fashions are of vital interest to each of us so be sure to mark the date—a one o'clock luncheon and style show on March 11 at the Brown Hotel.

I'll be there and I hope you will too.

Expectantly—and with style in my eye,

(Mrs. Jos. C.) Helen Asman Dahlem.

### OUR NATIONAL PUBLICATION

The Woman's Auxilliary to the American Medical Association is making a special effort at this time to awaken wide-spread interest in its activities, by increasing the number of readers of the Bulletin.

This little booklet is a successor to the News Letter which for many years has kept the officers and board members acquainted with the progress of the Auxiliaries of all the States. It is published quarterly and contains reports of conventions, plans of work, inspirational messages from leaders, and news of the hour in the medical world.

It is a great help in promoting interest in local Auxiliaries, especially where the program is new. Many other interesting items are to be found within its forty pages. It is hoped to have 6,000 women, one-fourth of the membership, reading the Bulletin before the year is over. In this way the members may keep abreast of the trends in the medical world and be better able to function as members and leaders of the Auxiliaries in local, state, and national.

Mrs. Geo. H. Ewell, Editor

Mrs. H. E. Christenberry, Cir. Mgr.

## -:- EDITORIALS -:-

### THE CARDINAL

The Cardinal, adopted as the cover design for the first issue of the Quarterly, January, 1932, has gladdened the eye each succeeding New Year and broadcast good cheer far and near.

Now, the Cardinal is adopting the Auxiliary beginning, at least, with one member, Mrs. John B. Floyd, Richmond.

As a rule, the Cardinal is considered a shy bird but Mrs. Floyd has proved that this rule can be broken for she had a devoted Cardinal that nested near her home and became a frequent house guest.

With a friend, we enjoyed the pleasure of an overnight visit with Mrs. Floyd. That was on April 21, 1938. When we entered the front door, we found Mrs. Floyd and her daughter feeding lettuce leaves to a Lady Cardinal which flew from one to the other with window, lamp and picture stops between, accompanied by much conversation, all three in good voice, quiet but gay. The Lady, we learned, had just enjoyed her daily bath in a tiny bowl in the sink while the Mister guarded her nest.

Next morning, at breakfast, these experiences were related to our husband, who arrived about midnight with Dr. Floyd from a distant County Medical Society meeting. His middle name is Thomas. So, he doubted. Eventually, Mrs. Floyd excused herself from the table to attend to matters in the kitchen. Presently she returned, having first stepped out into the sunshine in the garden and softly called, "Timmy! Timmy! Timmy!" When she entered the Lady Cardinal was in her hand. Perched on her finger Timmy pecked at a few crumbs while getting accustomed to our strange new voices and faces, but soon was flitting from chair to window to door; then to top of our August Husband's head! Then of all things, to our head and at last to our plate for a few choice bits of breakfast.

Let us all read Mrs. Floyd's TIMMY on page 18 and find for our own enjoyment right in our own home and garden some pleasure as unique and comforting.

### THE COLD CAMPAIGN

The Cold Campaign of the Woman's Auxiliary to the Kentucky State Medical Association seems to be gaining momentum. On Wednesday, December 4, the Louisville Courier-Journal carried a half page spread of pictures of Auxiliary members wearing masks and an article stressing the importance of trying to avoid colds. Miss Florence Hauswald, Director of Nurses, Louisville City Health Department, asked for masks to be used in the well-baby clinics. The

very alert sewing unit of the Jefferson County Auxiliary promptly met the need. Mrs. Stephen C. McCoy has accepted the responsibility of distributing homemade masks, and will be glad to furnish the pattern to anyone requesting it. They are simple to make.

### SAFE TECHNIQUE FOR NOSE BLOWING

When blowing the nose, blow one side at a time—with one breath (exhalation.) Keep open the nostril being blown. Close the opposite nostril by pressing with a finger or thumb, covered by the handkerchief. Do not blow alternately, first one side and then the other, in rapid succession during one exhalation or breath.

(According to Our Medical Advisor)

### A. M. A. PUBLICATIONS

Have you read the Fall issue of the Bulletin of the Woman's Auxiliary to the American Medical Association? If not, you have missed some good Auxiliary material. The next issue will soon be off the press. One Dollar a year, is the subscription price which you may send to the Circulation Manager, Mrs. H. E. Christenberry, Knoxville, Tennessee, and receive this helpful quarterly publication.

The published Minutes and Reports of the 1940 Annual Meeting of the American Medical Auxiliary, held in New York, has just reached the Editor's desk. So, you may have this, too. Each State President and County President, as well as Chairmen of the various committees will find valuable aid within the covers of this 84 page booklet.

### COMPLIMENTS FROM MISSISSIPPI

The November, 1940, issue of The Mississippi Doctor, official organ of the Mid-South Postgraduate Assembly, Mississippi State Medical Association, published monthly at Booneville, Mississippi, gives considerable space to Kentucky medical interests.

Auxiliary members will be delighted to know that here published, in full, is the radio dramatization entitled Jane Todd Crawford, written by Mrs. Samuel H. Flowers, Middlesboro, for Jane Todd Crawford Day, December 13, 1937. An editorial note explains that it "is presented to aid the Southern Medical Auxiliary to place a memorial to the honor of Jane Todd Crawford." Our very special thanks, Mr. Editor.

A fine editorial enlisting interest in the forthcoming meeting of the Southern Medical Association in Louisville is found on page 348. Other generous references are found elsewhere.

Outstanding is the fact that the whole front



cover is devoted to the, then, President of the Southern Medical Association, Dr. A. T. McCormack, with a glowing tribute beneath a speaking likeness that also smiles engagingly, as though quite as much at home with Mississippi doctors as he would be with Kentucky doctors.

Our grateful thanks to the Mississippi Doctor.

### OUR BUSINESS

Mrs. Wm. H. Emrich

## Advertisers Contest For 1941

Our Advertisers Contest of 1940 was so successful that Auxiliary Members and our Advertisers want it repeated again this year. We believe we can make this Contest of 1941, bigger, better and more interesting for we have a wider knowledge gained from last year's experience.

Our Aim is to have every member of the Woman's Auxiliary to the Kentucky State Medical Society enter the contest. It is an old business principle that a claim is false or exaggerated until proved to be true. We women of the Auxiliary are going to prove again to our Advertisers that it pays to advertise in the Quarterly.

### Buy From Our Advertisers

It is essential that we are thoroughly familiar with each Advertisement carried in each of the four issues of the 1941 Quarterly. Then when in need of the services and merchandise offered by our Advertisers, buy from them.

### Save All Sales Evidence

Whenever a purchase is made, insist on a sales slip or receipt; also save wrappers, labels, bottle and jar tops from all products advertised in the Quarterly. We might ask our friends to help us save also. Start now at the beginning of this New Year to save for a prize. Rules for awards will be published in the April issue of the Quarterly along with a complete list of the prizes donated by our generous Advertisers. The contest will close August 31, 1941, and awards will be made at the Annual Meeting of the Woman's Auxiliary to the Kentucky State Medical Association.

In order to give all Auxiliary Members throughout Kentucky an equal opportunity to win a prize, we have asked them for suggestions which we shall gladly include in the rules.

The Editor, Business and Advertising Managers of the Quarterly extend sincere good wishes to our faithful Advertisers, Donors and Friends for a Happy, Healthful, Peaceful and Prosperous New Year.

## MINUTES OF THE MID-YEAR BOARD MEETING

The Third Mid-Year Board Meeting of the Woman's Auxiliary to the Kentucky State Medical Association was held in the Derby Room, Brown Hotel, Louisville, Tuesday, November 12, 1940, with the President, Mrs. John M. Blades, Butler, presiding. A quorum was present.

A luncheon, at which we were honored to have the President of the Kentucky State Medical Association, the President of the Woman's Auxiliary to the American Medical Association and the President and President-Elect of the Woman's Auxiliary to the Southern Medical Association, preceded the business meeting.

The Invocation was offered by Mrs. Luther Bach, Bellevue.

Dr. Austin Bell, Hopkinsville, President of the Kentucky State Medical Association, outlined some objectives the Auxiliary might undertake.

The President of the Woman's Auxiliary to the Southern Medical Association, Mrs. Charles P. Corn, Greenville, South Carolina, chose as her

## ICE CREAM

### A Health Food

## "BUTTERMANN

## Cream Ice Cream"



## "HOLLENBACH

## Pure Ice Cream"



## BUTTERMANN

## ICE CREAM COMPANY

Owned and Operated by  
Louisville People

Louisville, Kentucky

## MODEL DRUG STORES

### CRESCENT HILL STORE

Brownsboro Road—next door to Steiden  
Store—Phone TA 2581

### HIGHLAND STORE

Bardstown Road and Eastern Parkway—  
Phone Highland 1620

subject, Present Day Opportunities for a Doctor's Wife.

Mrs. V. E. Holcombe, Charleston, West Virginia, President of the Woman's Auxiliary to the American Medical Association, spoke on Enlarging the Circulation of the Bulletin of the National Auxiliary.

The President-Elect of the Woman's Auxiliary to the Southern Medical Association, Mrs. M. Pinson Neal, Columbia, Missouri, was another Honor Guest.

After the addresses, Mrs. Russell E. Kinsey, Williamstown, led the group in the singing of several old favorites as well as God Bless America. 31 were present at the Luncheon.

Fifteen members of the Executive Board remained for the short business session. Roll call was answered by 9 Officers, 11 Chairmen and 6 County Presidents.

A motion carried that the reading of the Minutes of the Post-Convention Board meeting held in Lexington, September 19, 1940, be dispensed with as they had been published in the October Quarterly.

Brief Reports were made by the following Officers, Chairmen and County Presidents: Officers:

1st Vice-President—Mrs. John B. Floyd, Richmond.

Corresponding Secretary—Mrs. Donald P. DeHart, Butler.

Treasurer—Mrs. Luther Bach, Bellevue, reported a balance of \$48.45 in the checking account.

#### Committee Chairmen:

Cancer Control—Mrs. Bernard Asman, Louisville.

Exhibit—Mrs. Joseph Barr, Frankfort.

Finance—Mrs. J. R. Shacklette, Jeffersontown.

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*renee*

**WOMEN'S APPAREL**

*"Exclusive But Not Expensive"*

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Bonnycastle

- Dresses
- Hats
- Coats
- Sportswear
- Hosiery
- Bags

Louisville, Ky.

Hygeia—Report read by Secretary.

Jane Todd Crawford Memorial—Mrs. A. T. McCormack, Louisville.

Legislation—Mrs. Eleanor Hume Offutt, Frankfort.

Program—Mrs. R. T. Layman, Elizabethtown.

#### The Quarterly:

Editor—Mrs. A. T. McCormack, Louisville.

Advertising Manager—Mrs. Joseph E. Wier, Louisville.

#### County Presidents:

Calloway—Mrs. Evan L. Garrett, Murray.

Franklin—Mrs. Joseph Barr, Frankfort, Past President, made report.

Hardin—Mrs. George Bradley, Elizabethtown.

Jefferson—Report read by Secretary.

Licking Valley—Mrs. Luther Bach, Bellevue.

Madison—Mrs. Shelby Carr, Richmond.

The Doctors Day Chairman, Mrs. Russell E. Kinsey, reported that May 30, 1941, had been designated Doctors Day in honor of "The Country Doctor." She announced that each Auxiliary had been asked to do as much research on their own County Physicians as possible and invited to enter a contest for the most interesting biography. The winning sketch will be published in the Quarterly. Mrs. Kinsey suggested that each Auxiliary celebrate Doctors Day with a Tea in honor of all the doctors in the County, the Tea to be given during the week of May 30th. She also suggested the placing of a wreath on the graves of all deceased Physicians on May 30th.

The President announced that the date of the next Board Meeting will be published in the January Quarterly.

The President announced the appointment of Mrs. Joseph Dahlem, Louisville, as Chairman of the Style Show which the State Auxiliary will sponsor for the support of the Quarterly and which will be given in Louisville in the Spring.

A Nominating Committee, to prepare a ballot to present at the Annual Meeting in Louisville in October, 1941, was elected as follows: Mrs. S. C. McCoy, Louisville, Jefferson County, Chairman; Mrs. R. T. Layman, Elizabethtown, Hardin County; Mrs. John H. Rutledge, Richmond, Madison County; Mrs. J. Asher Caldwell, Southgate, Campbell County; Mrs. James Alfred Outland, Murray, Calloway County.

Adjourned, 4:15 P. M.

Grace Stroud, Recording Secretary.

# Newman Drug Co., Inc.

THE HOME OF OVER A MILLION PRESCRIPTIONS

3rd and Broadway

Louisville, Kentucky

Established in 1867



# Achievement Project--County Auxiliary Development

Mrs. John M. Blades, Butler, President

Beginning September 19, 1940— Ending at Annual Meeting, 1941

## Program For 1940-1941

Each County should keep a record of every item of achievement and send monthly report to State Program Chairman, Mrs. R. T. Layman, Elizabethtown.

Award—Blue Ribbon.

Judging Standards—All ratings based on membership percentage at beginning of Year.

To win, small organizations have as good chance as large organizations.

List of Credits for Award to County Auxiliary for Outstanding Achievement:

	Points
1. State and National Dues paid by 31st of March, 1941 .....	2½
2. Advisory Council from local Medical Society .....	2½
3. All Communications pertaining to Auxiliary Work answered immediately .....	2½
4. Names of Newly elected Officers and Committee Chairmen sent immediately to State President and to Editor of the Quarterly .....	2½
5. Report of Year's work sent to State President by August 1st .....	2½
6. Delegate Representation and Report of Year's Work presented at Annual Meeting .....	2½
7. Program Plans for Year's Work made in advance, when New Officers are elected, and copies sent to State President and State Program Chairman .....	5
8. One or more Health Education Programs during the year, open to the public or to representatives of lay organizations .....	10
9. Provide Speakers on Health Subjects for lay organizations. (Parent-Teacher, Church Groups, Women's Clubs, etc.) .....	10
10. Cold Abatement Campaign, program—each meeting program ....	5
Each Member wearing mask while afflicted with cold .....	1
11. Active participation in some project for community betterment such as assisting Women's Field Army for Cancer Control .....	10
12. Give a program designed to popularize approval of the New Pre-Marital Health Examination Law re Venereal Diseases .....	15
13. Increase in Hygeia subscriptions, based on membership at the beginning of year .....	5
14. Gift of Hygeia Subscriptions to Local Libraries and Schools .....	5
15. Full Staff of Active Chairmen—or as many as Membership of County Auxiliary allows—to correspond with State and National Auxiliary. ....	5
16. Increase in Membership (percentage basis) .....	5
17. Observance of Doctor's Day for date designated .....	10
18. Doctor Shop Donation — for each item .....	2½-10
19. Jane Todd Crawford Day Observance, December 13th .....	10
20. Jane Todd Crawford Memorial Fund, for each \$1 paid to State Treasurer .....	1
21. Jane Todd Crawford Trail planting donations; for each lot .....	2½-10
22. Cooperation in financial support of Quarterly and contributions published in the Quarterly (sent to Editor by 1st month—March, June, September, December) .....	2½
News items not less than 20 during the year .....	2½
Poem—Original .....	2½
Picture—with cut or money to pay for cut .....	2½
Story .....	2
Feature—New or on any regularly carried subject. (Tuberculosis, Cancer Control, Child, etc.)...	2½
Advertising contracts secured for each dollar .....	2½
23. Exhibit of Year Book and History of County Auxiliary at State Annual Meeting .....	2½
24. Clippings of publicity brought to State Annual Meeting in Scrap Book or mounted on cardboard for exhibit .....	2½
25. Historical Collection: Items, clippings, pictures, etc., sent to Mrs. C. C. Howard, Glasgow, Chairman, or to Miss Louise Morel, 620 So. Third St., Louisville .....	2½
26. Each Member attending State Annual Meeting .....	5

**THE SOUTHERN IN LOUISVILLE****Letter From Mrs. Henry Enos Tuley**

Louisville, Kentucky

November 15, 1940

Dear Carol:

This has been a busy week, so I am late in getting your weekly letter mailed to reach you Monday. You will be interested in hearing of the annual meeting of the Southern Medical Association and Woman's Auxiliary here in Louisville. 'Twas a rare occurrence to have the meeting in the home city of the President of the Association, so Dr. Arthur T. McCormack was a busy man—President and host.

Of course, our Auxiliary meeting was interesting to me, although I enjoyed the scientific papers of the Doctors at the Armory and the exhibits, too. Drugs, plastic surgery, therapeutic treatments of many types (you know my interests there) and so many new things beside the Doctor's Hobby Exhibit which I found fascinating. Such varied, interesting and unique hobbies, some of them. Dr. Bass of New Orleans displayed her remarkable collection of pictures and books and articles on the history of medical women which some day may be written. This was so interesting.

Auxiliary sessions opened with registration, Tuesday morning. I registered and being on no special committee, except act as hostess as all members did, I established myself outside the registration table and corraled any one who looked inquiring, provided card and pen for registration and indicated the proper person from whom to get tickets for luncheons, trip to Old Kentucky Home in Bardstown or trips around town to the museum and points of interest.

One makes so many pleasant contacts in these meetings. Mrs. Charles P. Corn, Greenville, South Carolina, President of the Southern Medical Auxiliary, presided. A gracious lady and an effective worker, evidently interested in Auxiliary developments. Mrs. M. Pinson Neal, Columbia, Missouri, President-Elect since last year's meeting, was installed as our new President at the concluding session when Mrs. Corn made her farewell address. Mrs. J. Ullman Reeves, Mobile, Alabama, was elected President-Elect and will use this year to prepare for her installation next year and the work which follows. Mrs. V. E. Holcombe, Charleston, West Virginia, President of the American Medical Auxiliary—our National President—was also present and impressed me. She is, of course, an effective worker in the S.M.A., also. These, and so many I met, seem vitally interested in our work and glad to do anything to advance the

varied projects the Auxiliary has taken unto itself. No matter how trivial the task nor how prominent the leadership, each appeared eager to do her bit—and do it, now. One could not but be enthused by their evident sincerity.

On Wednesday, the Annual Luncheon was held in the Crystal Ball Room of the Brown Hotel and was delightful. Beautiful autumn decorations for the tables and delicious food. It was followed by a surprising and altogether charming pageant depicting memorable scenes of Pioneer Kentucky. I can't take the time to describe it to you now but will send you a copy of our next Kentucky Auxiliary Quarterly containing the script. But no description does it justice. You should have seen it. It was colorful, musical, beautiful, instructive and well presented. Not a bit amateurish, as one would naturally expect. Later, there was a program at the Woman's Club where Dr. McCormack and Dr. Thomas Parran (I know you have heard him in Washington) spoke, both interesting and instructive. This was followed by a delightful Tea.

Thursday was the concluding session when Mrs. Neal was installed as the new President. Later, she held a Board Meeting and discussed plans for future work with the new Board. Then followed luncheon at the famous old Pendennis Club when we just chatted and listened to a short musical program and a brief speech by Dr. McCormack.

I haven't gone into detail about the sessions but there were the usual pleasant greetings, introductions, Executive Board Breakfast where a miniature Jane Todd Crawford Trail the length of the table evoked comment and reminded all that this State is where the Great Experiment took place. Then, Reports, Resolutions, a beautiful Memorial Service which greatly impressed me for so many of our members have passed on this past year.

I did not attend the evening sessions but the President's Reception and Ball, a memorable occasion I am told, was held in the Crystal Ball Room which looked like a garden of chrysanthemums immediately following the President's Meeting when Dr. McCormack made his address which I hear was unusually fine.

Altogether, I think the meeting was most worthwhile. Certainly, I found it interesting and I felt each night when I reached home that I could say, with that old song—"I've had a good, today." I hope every one else felt so, too.

I'll give you the family news in my next week's letter. Knew, though, you would enjoy hearing about the meeting while it is news. Addios. Ethel.



## PRESENT DAY OPPORTUNITIES OF SERVICE FOR A DOCTOR'S WIFE

Mrs. Chas. P. Corn, Greenville, S. C.

President of the Woman's Auxiliary to the S. M. A., 1939-1940

In thinking of the present day opportunities for service for a doctor's wife, I am reminded of a remark which Dr. Rock Sleyster, President of the American Medical Association, made in his address to the National Auxiliary in St. Louis, Missouri, last May. He said, "No single influence helped a doctor so much as his wife and his home. Here she may create a comfortable and congenial atmosphere, nourishing not only the physical needs of her physician husband and her family, but also their mental and spiritual requirements." So we agree with Dr. Sleyster that the first and foremost opportunity for service is in the home, sharing his life dedicated to the professional call. We realize she must be a person of idealism and altruistic aspirations, else she would not have married a doctor—for the practice of medicine grew out of a sympathy for humanity and a desire to relieve suffering and distress.

The doctor's wife is to her husband as Longfellow's Minnehaha to Hiawatha:

"As unto the bow the cord is,

So unto man is woman.

Though she bends him, she obeys him

Though she draws him, yet she follows

Useless each without the other."

The true doctor's wife, like the faithful physician, himself, will never be a slacker and her greatest opportunity for service, outside her home, is in working shoulder to shoulder with her husband in his altruistic efforts to eradicate disease and, in so doing, add happiness and prosperity to all those about her.

Secondly, one of the greatest privileges and opportunities for service comes through the Woman's Auxiliary to the doctor's wife, by creating and maintaining healthy contacts between the public and the medical profession. The Auxiliaries are the doorways into lay groups. Women's organizations are knocking at the doorways and asking for guidance. The medical profession has an opportunity to enter and be the instructor, the guides. Communities and individuals are health-conscious and wish information. I heard some one say the other day that a girl from birth to the age of 14 needed her mother. From the ages of 14 to 40—she needed beauty—from 40 to 60 she needed personality and from 60 on, she needed money. This is all true, and well she might have added that she needed good health always.

If asked to be Chairman of a Health program in your club, gladly accept this, for it is an opportunity to help plan a wise and sane program

which suits your community. If every doctor's wife would sponsor one worth while authentic health program each year, our foundation would be a substantial one. Stress, or sponsor, if necessary, periodic health examinations for school children, or prenatal work, or the summer round-ups.

For the adults, too much stress cannot be made on health examinations for in this hurry scurry of life, they do not take time to have a physical examination. Statistics show that one out of every six applications for life insurance is declined or postponed. Get the disease before it gets you. One does not want to be like the man who—

"To get his wealth

He spent his health,

And then mid night and main

He turned around

And spent his wealth

To get his health again."

With agitation for socialized medicine, it behooves us as doctors' wives to give watchful assistance in any plans to keep the profession secure. Familiarize yourself with the facts regarding socialized medicine so as to be able to converse with people on this subject when there is need for it. Let us keep abreast of the times and be worth while citizens to make the world a better place in which to live.

The Chairman of Legislation in the National Auxiliary has asked each doctor's wife to be a registered voter. We should assume this responsibility as citizens, because democracy can function only when all the citizens vote intelligently. At this time everything that enters into our lives, schools, homes and jobs, comes under the jurisdiction of some governmental agency. What they do in the City Hall, the State House, and the Capitol at Washington has a bearing on our plans for our children and ourselves. Banded together, our combined strength may be able to accomplish much. So I hope we shall feel that another of our opportunities for service is to be a registered citizen in 1940.

### LOUISVILLE APOTHECARY, Inc.

"Ask your Doctor" about this "Prescription Drug Store"

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Louisville, Ky.

### SIGN OF THE PINE TREE

Broadway next  to the Brown

ANTIQUES, GIFTS, REPRODUCTIONS

Another opportunity for service that we do not want to overlook is that we as women, and mothers of the race, can do much to forward peace in this world which is war torn in so many countries. I quote from an editorial in "The Critic" in the New Statesman and Nation, London, which says: "Here is a thought provoking question from deepest Africa. An English missionary in a chat with an old negro cannibal of the tribe of Niam-Niam, told him of the enormous number of victims of the World War. 'How could you eat so much human meat?' questioned the cannibal. 'We whites do not eat human beings,' answered the missionary. 'Well then, what did you kill them for?,' asked the cannibal in great astonishment."

As members of the Southern Medical Auxiliary, our opportunities are again before us in continuing to uphold our two main objectives that we sponsor. These you are familiar with, but I shall mention them briefly, The Research and Romance of Medicine, and The Jane Todd Crawford Memorial.

In the work of Research and Romance of Medicine, all good medical and historical papers given in the various Auxiliaries of the 17 states comprising the Southern Medical Auxiliary are sent in each year and filed, making what is known as "The Southern Auxiliary Lending Library." Any member is privileged to borrow any of these articles for program material at any time. A list of the papers is kept on file of the ones on hand and the ones loaned out. Last year 147 papers and clippings were mailed out to 37 Auxiliaries in 11 of the states. This has proven to be one of the most helpful features of our Southern Auxiliary work. Mrs. Leslie Moore, 4202 Beverly Drive, Dallas, Texas, is Chairman of this work.

The Southern Medical Auxiliary has long been working toward a fitting memorial for the brave woman, Jane Todd Crawford, who in 1809 submitted to the first ovariectomy without an anesthetic.

There is \$1,169.73 in the J. T. C. fund in the Southern Medical Auxiliary Treasury now, and a committee is functioning to decide on some form of memorial for this pioneer heroine of surgery. \$1,000.00 of this amount in the Treasury was contributed by Kentucky two years ago. I trust that each state in our Southland will see fit to give a small amount this year toward this Southern Auxiliary memorial. Mrs. Luther Bach of Bellevue, Kentucky, is Chairman of this work.

Lastly, we do not want to neglect our social part, for friendship is the basis on which our Auxiliary was founded. There is nothing sweeter than the communion of friend with friend.



# Shackleton's



## STEINWAY

### and other fine Pianos

### The HAMMOND ORGAN

*"Everything in Music"*

Largest Stock of Records in Kentucky  
307-309 West Broadway  
LOUISVILLE, KENTUCKY

The joy that is created by the companionship of those of like ideals and ambitions creates an atmosphere that lingers in the heart like sweet perfume. Some one has asked, "What is fellowship?" and the best definition was—"Two fellows on the same ship."—That's fellowship.

Edwin Markham has said:

"There is a destiny  
That makes us brothers  
None goes his way alone  
All that we send into the lives of others  
Comes back into our own."

So we, as doctors' wives, find our opportunities for services in our present times, many and varied. May we feel that although individually we can accomplish little, we can pool our efforts in the interest of efficiency and that in the end our assets will outweigh our liabilities, and that although we have given much, we too, have received.

In closing, I am borrowing the following recipe for a club sandwich which I think will also be appropriate for our Auxiliary members, only I shall call it an Auxiliary Sandwich:

Take 2 ounces of Jollity; 1 large package of Unity; 3 cups of Neighborliness; 2½ heaping table spoons of Interest; 2 pinches of Originality; 1 cup of Reasoning (sifted 3 times); and a portion of Sincerity.

**DIRECTIONS:** Mix Jollity, Unity and Neighborliness well in a large bowl. Add Interest steadily, but not too slowly. When the batter gets smooth and shiny, dash in the Originality. Next, add evenly the Reasoning. (Be sure to sift 3 times.) Then make the sandwiches. But, before serving, garnish with a generous amount of Sincerity. Try it and see how it works.



# *Pioneer Kentucky*

## A PAGEANT

BY

Hilda Wier and George A. Hendon, Jr.

Presented in Honor of the

Southern Medical Auxiliary, Mrs. Charles P. Corn, President

in convention with the

Southern Medical Association

AT THE

Annual Auxiliary Luncheon, November 13, 1940

IN THE

Crystal Ball Room, Brown Hotel, Louisville, Kentucky

*A panoramic view in seven episodes of the lives of strong and courageous men and women who braved the perils of the wilderness to build their homes in this alluring garden spot of the world. Kentucky welcomed such stout-hearted men as Dr. Thomas Walker, the first white man to build a home within its boundaries, and the adventurers, Daniel Boone and George Rogers Clark, who fought to share the "Happy Hunting Ground" with the Red Men and blazed the trail for such illustrious characters as Abraham Lincoln, Dr. Ephraim McDowell, Jane Todd Crawford and John James Audubon. We today enjoy the fruit of their pioneering.*

### ORGANIZATION

Pageant Written by .....Hilda Wier and  
George A. Hendon, Jr.  
Prologue Written by....Professor E. T. C. Noe  
From "Pageant of Kentucky's Historic  
Past" presented at Harrodsburg, June  
16, 1924. Loaned by Mrs. W. T. Laf-  
ferty, Lexington.  
Executive Committee .....Hilda Wier  
George A. Hendon, Jr., Mrs. Woodford  
B. Troutman, Mrs. Bernard Asman  
General Director .....Hilda Wier  
Coach .....Elizabeth A. Wilson,  
Instructor in Dramatics Recrea-  
tion Division of Department of  
Welfare, City of Louisville.  
Music....Mrs. Edna Panther, Mrs. LeRoy Hobbs  
Stage Manager .....Virginia Emrich  
Set Designed by.....Tommy Noonan  
Lighting .....Stuart Keller  
Costumes Designed by....Mrs. W. B. Troutman  
Costumes Executed by....Mrs. Bernard Asman  
Mrs. S. C. McCoy, Mrs. George C. Leachman  
Properties .....Mrs. John M. Keaney, Jr.  
Programs .....Grace Stroud  
Dances Under the Direction of  
Frances Barrett

### CAST OF CHARACTERS

Reader .....George A. Hendon, Jr.  
Miss Kentucky .....Elizabeth Campbell  
Indians .....Douglass Hackett, John Plamp,  
Billy Nicholson, Bobby Burns,  
Jimmy Allen, Don Fishbach,  
Stewart Lancaster (a descen-  
dent of Daniel Boone)  
Dr. Thomas Walker.....Dr. Grady Rountree  
Scout .....Dr. Alex Griswold  
Surveyor .....Robert Tate  
Daniel Boone .....Dr. A. Clayton McCartv  
Jemima Boone .....Mary Pat Asman  
Mrs. Boone .....Grace Stroud  
George Rogers Clark... ..Dr. R. A. Bate, Jr.  
(a descendent of Clark)  
Dr. George Hartt (Hart)....Dr. Robert Hendon  
Jane Coomes .....Mrs. Richard T. Hudson  
Mr. Coomes .....John F. Callaham  
Dr. Ephraim McDowell.....Dr. John R. Pate  
Jane Todd Crawford.....Mrs. Robert Dickman  
John James Audubon....Dr. John B. Floyd, Jr.  
Abe Lincoln.....Jimmie Callaham  
Nancy Hanks Lincoln.....Mrs. E. L. Henderson  
Stephen Foster.....John Rodes Kellogg  
Jeanie .....Daphnie Brasfield

- Colonels ..... Dr. Louis J. Hackett,  
 Dr. C. M. Bernard, Richard, Foster,  
 Douglas Atherton, Dr. Esten Kim-  
 mell, Dr. John A. Lewis, Jr.
- Kentucky Belles .. Mrs. Marvin J. Mohlenkamp,  
 Mrs. A. Clayton McCarty, Mrs. C.  
 M. Bernard, Mrs. Robert Hendon,  
 Mary McDonald, Mariam Gard-  
 house
- Servant ..... Captain Daniel
- Negro Quartette .. The Voice of the Deep South  
 Quartette, Representing Simmons University.

### EPISODES AND FINALE

- I.—Kentucky, Indian Scout, 6 Indians
- II.—Kentucky, Dr. Thomas Walker, 5 Sur-  
 veyors.
- III.—Kentucky, Daniel Boone and Mrs. Boone  
 with Daughter, Jemima, George Rogers  
 Clark.
- IV.—Kentucky, Mr. William Coomes and wife,  
 Jane, Dr. George Hart.
- V.—Kentucky, Mrs. Jane Todd Crawford, Dr.  
 Ephraim McDowell
- VI.—Kentucky, John James Audubon, Abe Lin-  
 coln, Nancy Hanks Lincoln.
- VII.—Kentucky, Jeanie, Stephen Collins Foster,  
 Colonels, Kentucky Belles, Negro Quar-  
 tette.
- Finale—Kentucky, top, center, back—surround-  
 ed by Colonels and Belles; Negro Quar-  
 tette and Servant, left; Foster and  
 Jeanie, right. All characters standing  
 in 3 rows across stage except Indians,  
 squatted on lower level.

### SCENE

*Across the back of the playing area is placed a low platform; on this is placed a second platform leaving enough space on the first platform to dance a set of the Virginia reel comfortably. In the immediate center is placed a third plat- form small, just large enough for per- haps, one or two persons to stand. Ken- tucky stands here during certain scenes and the finale. Soft gray cur- tains hang from wire stretched across the back. If possible, it would add to the effect if screens of different heights were used as a background, but if this is not possible, the curtains will suffice. Two large, 14 feet, screens are placed at either side of the first platform in order to mask the entrances and to mask the lights. The microphone for the Reader should be placed behind one of the screens, and the prompter could sit behind the other. The lights should be very dim throughout the whole pageant except during the "Old Ken- tucky Home" episode, when they*

*should be brought up full and bright. If a Hammond organ is used, it should be placed at the right, in front of the screen, outside of the playing area. If an orchestra, or two pianos are used, it would be effective to have the pianos, preferably baby-grands, placed on either side of the screens, and have the pianists dressed in costumes of the period of the writing of "My Old Kentucky Home."*

### MUSIC

*Before the pageant starts, it would be effective if the pianists or organists would play a medley of Kentucky songs, "Barbara Allen," "Little Mohee," "The Riddle Song," or any other Ken- tucky pioneer songs the pianist might suggest. After playing for a few min- utes, the pianist should then play softly some type of background music—Grieg may be suggestive—all during the read- ing of the Prologue. At the conclusion of the reading of the Prologue, the music goes into an Indian theme.*

*The lights are still dim. Kentucky stands on the topmost platform. She stands very still, with her head lowered and hands folded very simply in front of her. At the conclusion of the reading of the Prologue, the lights come up and she raises her head.*

### PROLOGUE

#### READER

God spoke  
 And out of Chaos  
 Rose the Ocean, Earth and Sky,—  
 Rivers, flowing majestic beauty to the Sea  
 Lofty Mountains, crowned by Forests  
 Overlooking Plains and Valleys  
 Rich in Flowers and Fruits for Man,  
 His latest handiwork.  
 And in the midst of each hemisphere  
 He set a garden  
 Eden in the East,  
 Kentucky in the West . . .  
 And so alluring was the beauty of Kentucky  
 That even beasts came here to find a home,—  
 The Bison and Behemoth  
 The Silver Fox from tropic zones,  
 The Polar Bear from regions of the North  
 And now, their bones lie side by side  
 In many caverns of Kentucky.

No eye that ever looked upon her undulating  
 Seas of grass and sedge,  
 Her rhythmic fields of hemp and maize  
 But loved Kentucky.  
 No wonder that the Red Men discovered here  
 The Happy Hunting ground,



The symbol of Elysium.  
 No wonder either that the Paleface came  
 To build his altar and smoke the Pipe of Peace  
 But still to claim his right  
 To share a portion  
 Of these hills and woodlands  
 And shimmering fields of grass.  
 And so the white man came  
 From regions that were good and fair  
 And brought his loved ones—  
 Bride and Groom  
 The gray haired Sire  
 The baby at the breast,  
 Nor ever cast one longing look  
 To homes they left behind.  
 He came that he might worship here  
 According to his conscience.  
 He came to till the soil,  
 To fell the forests,  
 To hew and mill the lumber for his home.  
 To build a state of men and women  
 Strong and beautiful  
 As the land in which they should abide.  
 He knew the sacrifice  
 The hardships and the dangers lurking every-  
     where.  
 The savage arrow  
 The tomahawk  
 The scalping knife.  
 But nothing daunted men like Boone,  
 Who blazed the trail;  
 Or Harrod, Logan  
 And a thousand other pioneers.  
 And so they came,  
 And built the first stockade town—  
 Surveyed the land,  
 And marked the boundaries  
 Dividing all according to law.  
 The hum of the spinning wheel,  
 And the shuttle of the lumbering loom  
 Oft blended with the song of the matron and  
     maid,  
 And the whistle of the lad who followed the  
     plow.  
 The crack of the resounding gun;  
 The howl of the hungry wolf;  
 The scream of the crouching panther;  
 And even the savage whoop of the deadly  
     Indian foe,  
 But quickened the blood of the settlers here  
 And made them alert and daring and brave.  
 Not only here in these "Meadow-lands"  
 They builded their strong proud homes  
 But some like Clark, pushed onward  
 And opened the great Northwest.  
 Forth from the loins of those who settled here  
 Came Marshall and Richard Meniffee  
 Whose eloquence will never cease to charm  
 Till words have lost the power  
 To touch the human heart;

McDowell with his surgery and healing art;  
 And he who carved his dream of Chastity in  
     stone.  
 Earth has not known a greater heart than  
     Lincoln;  
 No soldier ever drew more gallant sword than  
     Morgan  
 No name is more illustrious than that of  
     Breckenridge  
 Who stormed the fortresses of ignorance and  
     greed  
 And saved our common schools.  
 The names of Shelby and Crittenden,  
 Of Hardin, Wickliffe and Clay  
 Are all but synonyms of government and law.  
 On fame's eternal camping ground  
 O'Hara's tent is spread  
 All these and many more  
 Descendants of Kentucky's pioneers  
 Who chose this garden spot  
 And builded here their homes.

## MUSIC

*As the reader finishes reading the Prologue, the music comes up louder and the lights come up brighter. Kentucky raises her head, and looks toward stage right as a sharp war whoop is heard.*

## EPISODE I.

## PANTOMINE

*Six Indians rush in, rush up to the second platform and pull Kentucky down to lower platform. They dance around her all the while whooping in joy. Their dance is interrupted by another Indian who rushes in and throws himself on the second platform—Center—this will put this character on a different level. He kneels down and rocks back and forth, showing terror in his every move! The others stop their dance, and crouch on the ground looking up at the other Indian. He motions to stage Right — indicating that someone is coming. The Indian runner pantomines that the newcomers are strange beings, and all the Indians cower and back off stage Left as the music comes up louder and Kentucky slowly moves to the second platform in the Center.*

## READER

So—the Indians, who loved Kentucky because  
     she was so beautiful,  
 Packed their long bows, their tepees, their  
     little household gods  
 And moved Westward, ever Westward, hoping  
     to find another Kentucky—  
 A place where cares were laid away.  
 But they never did.  
 Dr. Walker and his party had marked it  
 Marked it for civilization  
 And though the Indians had never heard of

civilization

They knew, they knew, they knew.

MUSIC

*Pilgrims Chorus from Tannhauser (very softly as background for Reader)*

### EPISODE II.

*Dr. Walker and party enter stage Right, one of the surveyors crosses to stage Left and sets up his surveying instrument. He starts to look through the instrument, when Kentucky advances toward him. She seems startled, then curious, the surveyor draws back, when Dr. Walker walks to her. He bows very graciously.*

**Kentucky:** Strangers, you are welcome!

**Dr. Walker:** Thank you, Madam, you sound as if you meant it. I am Dr. Thomas Walker. My party and I are surveying this beautiful land for President Jefferson.

**Kentucky:** Then settlers will come! There's nothing we like better than company. Come and stay with us forever.

**Walker:** I can't. I must go back to Virginia. You see I am a doctor there, and the people sort of depend on me when they get sick. But I'm going to take some of your herbs back with me. They'll be useful.

**Kentucky:** You are welcome, I'm sure, but I wish you'd stay.

**Walker:** Don't worry. Others will come and stay because they will be unable to tear themselves away from the beauty of the land.

MUSIC

*The music comes up louder.*

READER

Then came the darling of our childhood  
Old Dan'l Boone in buckskin britches clad.  
Life had not been good to Dan'l.

There were too many neighbors in North Carolina!

Why a man could look out his cabin door and  
see a neighbor's chimney smoke!

So, he and his wife and daughter Jemima,  
moved to Kentucky

To be free.

And about this time came George Rogers  
Clark,

A Virginian, to add his graces to a gracious  
land—

A man who led his soldiers through the  
swamps,

Conqueror of Kaskaskia and Vincennes

And who now sleeps in Kentucky soil.

### EPISODE III.

*During the reading of the introductory lines Kentucky has moved down stage Center and stands looking off stage Right. As the Boone party advances, Kentucky comes toward them on the lower level. She looks at Jemima and Mrs. Boone in amazement and then she*

*advances towards them with outstretched hands.*

**Kentucky:** Why it's a white woman. A woman like me. Oh, welcome, welcome!

**Boone:** Yes'm, I guess they're the first two white women to set foot on this land. This is my wife. She's my daughter, Jemima.

**Kentucky:** And who are you?

**Boone:** Dan'l Boone, from over North Carolina way. Things got too crowded there. We got to have room. This is a fine land. No near neighbors. (He looks around).

*(George Rogers Clark enters. He comes in stage Left.)*

**Kentucky:** It's Captain George Rogers Clark. Oh, Captain Clark!

**Clark:** I see you have visitors.

**Kentucky:** This is Dan'l Boone, his wife, his daughter, Miss Jemima Boone.

**Clark:** Boone, I'm delighted to see you. I've heard of you. You blazed the trail through the wilderness. That was a well-done piece of work.

**Boone:** Oh shucks, somebody had to do it. But we like this land and we're going to stay.

**Clark:** Splendid. You'll get along if you don't mind living without neighbors.

**Boone:** Just what I want. When I get too many neighbors I'll move out, no offense to you, Captain Clark. When we are settled, I hope you'll come out and take a bite o' victuals with us.

**Clark:** Indeed I will. And now, I must go, but we'll meet. Goodbye, ma'am. Goodbye, Mistress Jemima.

*While this conversation is going on, Kentucky and the two women have gone up to the second platform deep in conversation. Kentucky fingers the stuff of which the women's dresses are made, she touches their slat bonnets; they show her bits of cloth from the bags hung across their shoulders (this may be a large piece of cloth tied up by the corners). As Clark departs, the women reluctantly leave Kentucky and follow Boone off stage Right, while Clark exits Left. Kentucky walks slowly to the right, second platform and stands looking off while the Reader reads the next lines.*

Came Jane Coomes and Dr. George Hart  
They were simple people with no idea of being  
in history books

All Jane Coomes wanted was to teach the  
little children to read and write

Dr. Hart reasoned that if there were people in  
Kentucky

Some of them are going to get sick,



Then, they would need a doctor.

MUSIC

#### EPISODE IV.

*Kentucky moves to meet Dr. Hart and Jane Coomes as they come in stage Right. They enter on the lower platform. Kentucky still remains on the second level.*

**Kentucky:** You are so welcome. I know you are going to like it here and please, stay.

**Dr. Hart:** Yes, we are going to stay. It's a fine place. This is Mistress Jane Coomes and her husband. She is a school teacher. I am Dr. Hart.

**Kentucky:** Oh! A school teacher and a doctor. Just what we needed. How did you hear of us and know that we wanted you so?

**Dr. Hart:** Doctors and school teachers are funny people, ma'am. Nobody has to tell them where they're needed. They seem to just guess it. Then, they go there. That's all there is to it.

**Kentucky:** You both must go to Harrodsburg. You can begin your work in our first settlement.

**Dr. Hart:** (To Coomes) Lead the way, Pioneer.

*Mr. William Coomes leads the party off the stage Left, and Kentucky moves to the top level and stands there throughout the next episode.*

MUSIC

*"Rock of Ages."*

READER

Later, came Dr. McDowell and Jane Todd Crawford. They tell me they're going to make a movie about it. It's bound to be a good movie, for Mrs. Crawford and Dr. McDowell were honest and brave. They dared the gods.

#### EPISODE V.

*Mrs. Crawford enters second level—stage Left, walks to Center and sits on the platform at Kentucky's feet. She clasps her hands about her knees and looks upward off stage Right, humming "Rock of Ages" to herself, rocking slowly back and forth begins to knit. Dr. McDowell enters on the second level stage Left and starts across when he sees Mrs. Crawford. He stops, watches her a moment and says:*

**Dr. McDowell:** Well, Mrs. Crawford, I see you're still singing hymns!

**Mrs. Crawford:** Oh, [turns around to look at him] Dr. McDowell, I'm so glad to see you. It's been a long time since I have seen you. It's been five years since I came to you in Danville, hasn't it? But you don't have to worry about me now, I never felt pearter in my life!

**Dr. McD.**: Any pains? Any discomfort?

**Mrs. C.:** No, indeed, Doctor. It's entirely different from that day in Danville. Those well-meaning people! They didn't think you could do it.

**Dr. McD.:** Well, Mrs. Crawford, they were just like anyone. Everyone resents something new but when it comes to pass they just accept it. They're quite civil to me now in Danville.

**Mrs. C.:** Civil! They ought to be putting up monuments to you!

**Dr. McD.:** Now wouldn't I look funny on a monument. You were the brave one. You had faith.

**Mrs. C.:** Well, Doctor, I always believe that when you feel someone is right, you just follow them to the end—and I thought you were right that day.

**Dr. McD.:** Your believing was half of it—perhaps all of it.

**Mrs. C.:** Now Doctor, you don't need to tell me that. (Starts off, then turns around and comes back). You're going to stay to dinner, aren't you? I'll kill a chicken and we have some jerked venison.

**Dr. McD.:** I'd like to but I can't. I have so many calls to make. (Shakes his head). So many sick people.

**Mrs. C.:** You're such a busy man. Well come again anytime. We're always glad to see you. Goodbye Doctor.

*for*  
**GOOD  
HEALTH:  
HONEY-  
KRUST**

*-the bread that's made  
with milk and honey*

(Exit Dr. McDowell.)

**Mrs. C.:** God bless him! (To Kentucky) Isn't he a fine man? (Enthusiastically) And I know he's a great Doctor! Well I must be going—there's always so much to be done.

*Mrs. Crawford exits humming "Rock of Ages."*

*Dr. McDowell goes off stage Right. Mrs. Crawford gets up and watches him off. Then she goes off stage Left, humming "Rock of Ages," the Music comes up and then fades away.*

MUSIC

READER

And in our state in the early nineteenth century

Were two human beings, one a man, and the other a boy

On his way to Indiana.

John Jacob Audubon and Abraham Lincoln

Both felt the caress of Kentucky.

Both went out to set things free.

What they freed doesn't matter—

What does count is, that they were living creatures.

MUSIC

*"Mine Eyes Have Seen the Glory."*

#### EPISODE VI.

*Kentucky comes down from the uppermost level and sits down on the base of this same level. There is the sound of a bird whistle, and she listens attentively. She stays in this position throughout the episode, listening to Audubon and Lincoln. Audubon enters stage Right and goes to the Center and sits on the second level. He pantomimes sketching a bird, looking up off stage Left as if watching the bird.*

*Nancy Hanks and Abe Lincoln enter lower level Right and stand for a second—Abe tip-toes up in back of Audubon and looks over his shoulder. After a moment—*

**Lincoln:** Powerful fine bird, Mister! It's a cardinal; ain't you a stranger in these parts?

**Audubon:** I'm Audubon, and I like to try to sketch all the birds I see.

**Lincoln:** I'm Abe Lincoln, I reckon I'm a friend to the birds too, but I can't make purty pictures of them. This is my maw, Nancy Hanks Lincoln. [Nancy bows, Audubon rises to acknowledge the introduction. Nancy places a hand on Lincoln's shoulder.]

**Nancy:** Come on, son, our journey's long; we be going into Indianty to farm.

**Audubon:** Yes ma'am, it's a far piece. [To Lincoln.] There are many beautiful birds between here and Indianty, boy. Be sure you harm none of them.

**Lincoln:** You bet, I won't hurt them. I'll be looking after 'em, sir. [Looking up earnestly into Audubon's face.] I just can't bear to see a living thing hurt or not set free.

*Audubon stands Center and watches Mrs. Lincoln and Abraham off Left. Abe turning about to watch Audubon as far as he is able.*

MUSIC

*"Beautiful Dreamer."*

#### EPISODE VII.

READER

Kentucky—

The beauty of which has inspired many to give utterance

To thoughts which will go down in the folk lore

Of all time. Chief Narrator for the "Sweet Singers" of the Homelands was Stephan Foster with his memorable songs.

*As the Reader finishes, Foster comes in Right and advances to the Center of second platform. He sits on the step of the third platform, and looks at the scroll in his hand, making a notation upon it from time to time. The music comes up louder and as he sits thus, a young girl enters from stage Left and walks over to him. Foster looks up, and then slowly rises, offers her his hand, bows very low to her and seats her on the step. Foster then sings "Jeanie with the Light Brown Hair."*

MUSIC

*"Jeanie with the Light Brown Hair."*

*At the conclusion of the song, Foster goes over to Jeanie and sits beside her. As he does this, two couples stroll in from the Right and two others from the Left. They seat themselves informally on the various stage levels.*

MUSIC

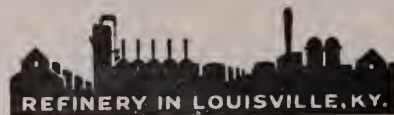
*"Camp Town Races."*

*The music comes up and a Negro*



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quartette steps out front, sings "Camp Town Races" and then, "Swing Low Sweet Chariot."

MUSIC

"Nellie Was A Lady."

At the conclusion of this song, the quartette goes out stage Left. The remaining couples come in stage Right and as they do so; the other couples join them and they take their positions on the lower level for their dance. The dancers may do either a "Lancers" or a "Virginia Reel," as they play "Oh Susannah."

MUSIC

"Oh Susannah."

DANCE

Virginia Reel

MUSIC

At the conclusion of the Dance, the dancers group themselves about on the lower level. Foster and Jeanie on the middle level. Kentucky standing on the topmost level. This takes place on introduction to "My Old Kentucky Home."

MUSIC

"My Old Kentucky Home"

While this music is being played, a Negro servant brings in a tray of Mint Juleps and passes it to the assemblage. Each

takes a cup and lifts it as Foster sings the first verse of *My Old Kentucky Home*. At the end of the first, all the participants in the pageant come in and stand in this order

Top Level

Kentucky (holding aloft the laurel wreath)

Second Level

Foster and Jeanie (Center)

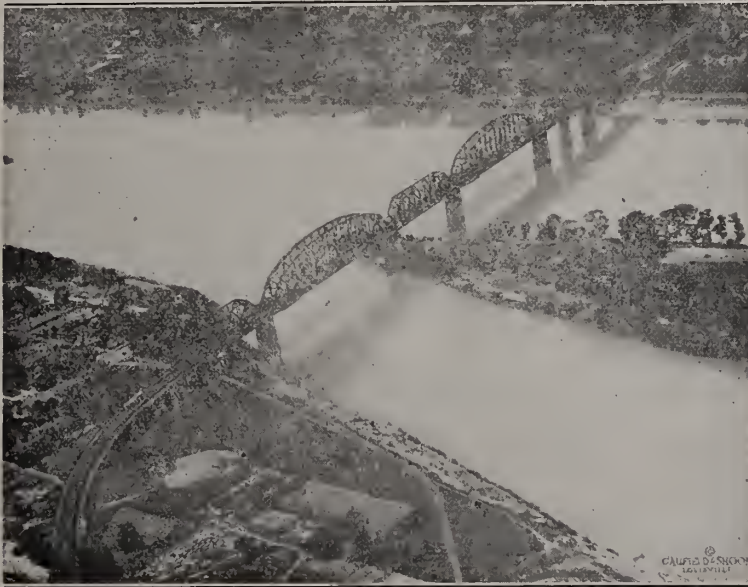
Colonels and ladies (they have stepped up by this time)

Lower Level

Audubon and Lincoln and Mrs. Lincoln, Jane T. Crawford and Dr. McDowell, Dr. Hart, Jane Coomes, Mr. Coomes, Daniel Boone, Mrs. Boone, Clark, Jemima, Dr. Walker and surveyors. Indians sit on floor directly in front of stage.

All stand except the Indians. They and the audience join in singing another verse of *My Old Kentucky Home*. They hold this pose throughout the encore and then, those on the lower level leave first by stage Right, the second leave stage Left, and finally Kentucky stage Left. The lights are dimmed, and it is

THE END.



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## TIMMY

**Mrs. John B. Floyd, Richmond**

A large variety of birds inhabit the old hollow water maples surrounding our home. One bitter cold, snowy winter we fed those remaining here in Richmond during the cold season, at nine in the morning and three in the afternoon. Some days we would forget. But not for long. The birds would crowd the window sill making much clamoring noise, that sounded suspiciously like the frequent cry "When do we eat?" of my own family in the house. So, they were fed popcorn and cornbread crumbs, with a bowl of warm water.

Spring came. There was a plenty of wild food, seeds and bugs in the yard and garden. Did these fellows shift for themselves? No. They had become the boldest of panhandlers, and still cluttered the window sills, cheeping lustily.

With the warm sun beaming down, I would sit quietly in the recliner, with the crumb pan in my lap. The bravest of the flock would swoop down and snatch as much as they could carry and fly away. Not so a little rusty Cardinal hen, who would loiter, eating and talking, eyeing me with an air of nonchalance, getting rather familiar when the pan was empty. She would perch on the chair any time of the day when I was sitting in it. Soon, she learned to take a professional stance on my thumb, pecking the crumbs in my hand. The Hitlers of the crowd, the Blue Jays, were very obnoxious and greedy. But dispersing them never seemed to frighten our Red Bird! She would never fly away, but with her head at a jaunty angle, cheeped triumphantly, cheerfully, somewhat like a winning fan at a ball game. Contrary to the old adage, in this case, familiarity seemed to breed content.

Before the summer was over, Timid, because she was anything but timid, became Timmy who answered to a whistle or the call "Timmy." She was now taking her daily bath in a small bowl on the kitchen sink, fluffing her feathers

on top of the refrigerator in the warmth of the working element, and flying in and out of the window when ever she so desired. She built her nest in the shrubbery beside the porch, sharing the duties of hatching one egg with her brilliant red feathered mate, who, while he ate with us, never quite trusted us enough to become familiar. Eventually the two were three. Timmy would still come into the house, but could never persuade the other birds that we were friends. Too busy to sit in the yard while the birds were fed, too busy to see that the top of the window was down, to which there of course, was objection because the flies knew about it too, this last year our friendship cooled. Yet, a little rusty Cardinal still comes to the window sill for food. Can it still be Timmy, my Timmy now three years old? (See Editorial, The Cardinal, p. 4)

## PROUD THEY WON BLUE RIBBON

**Mrs. Reba Burrow Flynn, Frankfort**

The Woman's Auxiliary of the Franklin County Medical Association is indeed proud of having won the blue ribbon award for the year 1940, and yet it feels humbled in the realization of how much more might have been accomplished. It has learned that the greater the efforts that are expended toward worthwhile achievements, the greater we find opportunities and need for service. Humanity has always and shall ever have need of the service of man and womankind, but undoubtedly, that need was never greater than today.

And so, again we admit our exceeding pride as we look on the little blue ribbon as a symbol of something accomplished, but it is a symbol also of something that has passed—a year that is behind us. Whatever measure of success was attained during the past year it was due to the co-operative efforts of a little group of women, who were fortunate in having as their leader a real worker, Mrs. Joseph Barr, and ever as an inspiring influence the guiding hand of Mrs. John G. South.

In the year that lies before us, we dedicate to our new president, Mrs. T. P. Leonard, that same loyal spirit of co-operation that has brought recognition to the Franklin County Woman's Auxiliary as an outstanding unit of the Kentucky State Medical Association, and may the close of this year find us looking with even greater pride, not alone to another little ribbon of blue, but to a grander year of achievements in service to others and a work well done.

To each and every Auxiliary Member of Kentucky's State Medical Association the Franklin County Auxiliary extends its sincerest wishes for a happy holiday season, and for health, prosperity and success throughout the new year.

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**LETTER FROM ABRAHAM LINCOLN**  
**(First Publication)**

(Copy Secured by Mrs. Henry Enos Tuley)

Bloomington, Illinois

Sept. 27th, 1841

Miss Mary Speed

Louisville, Ky.

My Friend:

Having resolved to write to some of your Mother's family, and not having the express permission of any one of them to do so, I have had some little difficulty in determining on which to inflict the task of reading what I now feel must be a most dull and silly letter; but when I remembered that you and I were something of cronies while I was at Farmington, and that while there, I once was under the necessity of shutting you up in a room to prevent your committing an assault and battery upon me, I instantly decided that you should be the devoted one.

I assume that you have not heard from Joshua and myself since we left because I think it doubtful whether he has written.

You remember there was some uneasiness about Joshua's health when we left. That little indisposition of his turned out to be nothing serious and it was pretty nearly forgotten when we reached Springfield. We got on board the Steam Boat Lebanon in the locks of the Canal about 12 o'clock M. of the day we left and reached St. Louis the next Monday at 8 P. M.

Nothing of interest happened during the passage except the vexatious delays occasioned by the sand bars he thought interesting. By the way, a fine example was presented on board the boat for contemplating the effect of condition upon human happiness. A gentleman had purchased twelve negroes in different parts of Kentucky and was taking them to a farm in the South. They were chained six and six together—a small iron clevis was around the left wrist of each and this fastened to the main chain by a shorter one at a convenient distance from the other, so that the negroes were strung together precisely like so many fish upon a trot-line. In this condition they were being separated from the scenes of their childhood, their friends, their fathers and mothers and brothers and sisters, and many from their wives and children and going into perpetual slavery where the lash of the master is proverbially more ruthless and unrelenting than any other where, and yet, amid all these distressing circumstances as we would

think them, they were the most cheerful and apparently happy creatures on board. One, whose offenses for which he had been sold was an over fondness for his wife, played the fiddle almost continually, and the others danced, sung, cracked jokes, and played various games with cards from day to day. How true it is that "God tempers the wind to the shorn lamb;" or in other words, that He renders the worst of human conditions tolerable while He permits the best to be nothing better than tolerable.

To return to the narrative. When we reached Springfield I staid but one day when I started on this tedious circuit where I now am. Do you remember my going to the city while I was in Kentucky to have a tooth extracted and making a failure of it? Well, that same tooth got to paining me so much that about a week since, I had it torn out bringing with it a bit of the jaw bone. The consequence of which is that my mouth is now so ~~so~~ so that I can neither talk nor eat—I am literally "subsisting on savory remembrances," that is, being unable to eat, I am living on the remembrance of the delicious dishes of peaches and cream we used to have at your house. When we left, Miss Fanny Henning was owing you a visit, as I understood. Has she paid it yet? If she has, are you not convinced she is one of the sweetest girls in the world? There is but one thing about her so far as I could perceive that I would have otherwise than as it is—that is something of a tendency to melancholy. This, let it be observed, is a misfortune—not a fault. Give her an assurance of my highest regard when you see her. Is little Sis Eliza Davis at your house? If she is, kiss her o'er and o'er again for me. Tell your Mother that I have not got her "present" with me but that I intend to read it regularly when I return home. I doubt not that it is really as she says, the best cure for the "Blues" could one but take it according to the truth.

Give my respects to all your sisters (including "Aunt Emma") and brothers. Tell Mrs. Peay, of whose happy face I shall long retain a pleasant remembrance, that I have been trying to think of a name for her homestead, and as yet cannot satisfy myself with one.

I shall be very happy to receive a line from you soon after you receive this and in case you choose to favor me with one, address it to Charleston, Coles Co., Ills., as I shall be there about the time to receive it.

Your sincere friend,

A. LINCOLN.

(Mr. Lincoln used the old style S when spelling words in which double S is used, E.B.T.)

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# THE END OF THE JANE TODD CRAWFORD TRAIL

## The Old Home of Dr. Ephraim McDowell, Danville, Kentucky

NOW KNOWN AS

### The Dr. Ephraim McDowell—Mrs. Jane Todd Crawford Memorial



Courtesy of the Herald-Leader, Lexington, Kentucky (July 28, 1940 issue).

In the above photograph is shown the great old brick fireplace of the kitchen, in the Dr. Ephraim McDowell home on Second Street in Danville. Restored are the pot and pan hooks, and the crane and toast racks. The home is described as a monument to early Kentucky architecture.\*

#### Eleanor Hume Offutt, Frankfort

What phantoms are gliding soundlessly upon the floors and what spectres are passing through the doors at the old house on Second Street in Danville?

Can it be that a kindly old doctor still hastens on his errands of mercy and hovers unseen over some sick bed?

Certainly, the spirit of Ephraim McDowell and that of Jane Todd Crawford seem very near us as we cross the threshold—sacred not only to the women of Kentucky but to the women of the world. Quiet dignity and peace reign over the old house now preserved as a shrine by the generosity of the medical profession. And what a

shrine it is to preserve!

Not only the memory of that great act of heroism when Jane Todd Crawford submitted to the surgeon's knife of Dr. Ephraim McDowell (in what was the first ovariectomy ever performed) seems to hallow it, but also the stately old house cries out that it was a home—the home of a Christian gentleman and scholar—a gentleman and scholar of the old school. It is a monument to early Kentucky architecture.

The old knocker which once adorned the door was removed many years ago, but has been returned to the house. We are not privileged to touch it, however, as fearing some vandal hand might desecrate it, it was not again affixed to the door. Looking at the knocker in its glass

\*From Mrs. Offutt's book discussing antiques which will soon be of the press.



case, we think of how many trembling hands must have clutched it in fright during the long years of its owner's service to mankind. One can even imagine its thud awakening some sleepy neighbor to murmur, "I wonder who is calling the doctor at this hour of the night?"

The fine old brick chimneys at either side of the house remind us of the old Virginia legend that a gentleman's standing was determined by the number of chimneys on his home. Indeed, this house was built in Virginia and, believe it or not, has never been moved, for Danville was in Virginia in those days.

The beautiful panelling in the lower right hand chamber with its deep finger prying has a distinct Chippendale flavor, while the low ceilings and small window panes are characteristic of the period. We go through this room into the dining room, and it is with a feeling of awe that we open the little stair door and mount the narrow kitchen stairs to the low chamber over the dining room where we are told Jane Todd Crawford carried her burden to Ephraim McDowell. Tread softly, this is holy ground!

The room has windows on both sides, and how delightful it is to note the tiny door, scarcely larger than the one in "Alice in Wonderland," which, after mounting several steps, one opens and thus is admitted into the master bedroom which faces the street. Perhaps this was Dr. McDowell's bedchamber. Why were old houses built on so many levels? Up hill and down dale was nothing to the up and down steps with which the early housewife had to contend. Mrs. McDowell must have spent many weary "extra" steps going up and down between these two rooms.

The front rooms are light and airy—indeed there are many windows for so old a house (the glazing problem having been a costly one at that period). (Another interesting historical note is that at an early period some communities levied a tax on windows so the luckless inhabitants were charged for light and air). Going from the master bedroom to the hall, one may descend by the front stairs and note in passing the graceful banisters. One finds under the stairs on the first floor a broad door opening on the back gallery which (as well as the dining room) leads to the kitchen. Here the epicure and the antiquarian will exclaim in unison over the great old brick fireplace. Restored are the pot and pan hooks, the crane and toast racks, while strings of drying herbs and a hollowed gourd give a realistic touch to the make-believe. The furniture in the kitchen is simple as befits the location, but ill-advisedly the paint has been removed from the cherry corner cupboard, which, usually, in a well conducted Kentucky kitchen of the period would not have been "finished."

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Fortunately, little furniture or "fixin's" have been put in the house and it is to be hoped that the hunt for pieces belonging to Dr. McDowell, or at least to his period, will be successful and that the truly lovely old place will not be cluttered with well meant but poorly selected pieces, a condition existing in far too many museums and shrines today.

Turn your cars toward Danville this afternoon and stop before the bronze plaque which reads:

"Dr. Ephraim McDowell, 1771-1831. Eminent American Physician and Surgeon. The Father of American Surgery. Lived and Performed the First Ovarian Operation, in this House, 1809."

### FIFTH NATIONAL SOCIAL HYGIENE DAY FEBRUARY 5, 1941

**America's Health Is America's Strength! Guard  
Against Syphilis!**

Americans face a new and stirring challenge in the campaign against venereal diseases, and the long range social hygiene program, principally for young people.

Fifth National Social Hygiene Day finds us with an extra job to do—a job of vital importance in the nation's plans for defense.

We must help guard our soldiers, our sailors, and our workers who build and service defense equipment from the gravest danger which threatens their health and strength—from the crippling, man-wasting assaults of syphilis and gonorrhea.

This is a job not only for Wednesday, February 5, 1941, but for every day in the year. It is a job for every community, every family, every man and woman.

For soldiers and sailors and industrial workers do not become infected with syphilis and gonorrhea while in camp or on board ships, or at their machines and work benches. They get these diseases in the communities from which they come and the communities which they visit while off duty.

**WE ARE CHALLENGED TO KEEP OUR  
COMMUNITIES CLEAN!**

Look not mournfully into the Past,—

It comes not back again

Wisely improve the present,—

It is thine

Go forth to meet the shadowy future

Without fear and with a manly heart.

—Longfellow

## CANCER CONTROL

### A MESSAGE FROM THE CHAIRMAN

Mrs. Bernard Asman, Louisville

As your State Chairman, I am coming before you again this year with another earnest plea for your whole-hearted co-operation in the fight against that terrible monster that took 150,000 lives in 1938, and most of them unnecessarily, for one of several reasons,—false modesty, ignorance, or the none-too-frequent reason, "I cannot afford an operation."

I wish to quote a few lines from an article I read in a pamphlet on Cancer in which it was stated that "Cancer has become Public Health Enemy No. 2, second only to heart disease." The fight on Cancer has, up to now, been carried on by the medical profession, research foundations and the American Society for the Control of Cancer, but unless the laymen, and that means all of us, are willing to assist—not much more can be done.

One way that we, the members of the families of physicians, can do a great deal toward helping is to get the necessary information upon this subject and be ready to answer questions and direct questioning persons to the proper authority—a good reliable physician.

Let every County President, if she be the Chairman for the Cancer Drive, or if she has appointed some one else, begin now to make extensive preparations for the Drive so that the month of April will be one she will always remember with grateful satisfaction because she has done her share and, possibly, been the means of saving some one life because she helped broadcast the information—either by talks, answering questions or giving out literature, that Cancer is curable when caught in time. Educate the public to the fact that they can find a cure if they will seek the proper authority in time. When in doubt, consult a good doctor and you will feel a great relief, is a very excellent bit of information to pass along.

A very good plan, to advocate this far ahead of the Drive, is to spread the news that a penny a day will help drive cancer away. If all would do this, from now until the Drive is over, we would have many, many more pennies to help with this program of education, than we will have if we wait until the Drive has been launched and the money will have to be all given at one time. Let us all do our utmost to make this a banner year. Can I count on your support?

"She who will not when she may—  
May not when she will."

## CLOCK BREAD

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### THE RETORT COURTEOUS

Two interesting characters in Kentucky Medicine were Dr. John A. Ouchterloney 18—1905) and Dr. David W. Yandell (1826-1898), both of Louisville. Rivals always, each was mindful of the popularity and success of the other. Both were brilliant and their trigger-like minds clicked whenever they approached each other. Gentlemen, "they fought with rapiers, not with bludgeons for their weapons." Dr. Yandell was quick of tongue, but Dr. Ouchterloney had an impediment, just short of a stutter. Meeting at a Medical Society dinner one evening, Dr. Ouchterloney was suddenly halted by Dr. Yandell who said, "Just a minute, Ouchterloney! Let me tell you something. I just heard a woman up the street tell some pretty tall tales about you and—" "Y-y-yes, Y-Y-Yandell" interrupted Dr. Ouchterloney, "Y-y-yes, Y-Y-Yandell. That's the p-p-penalty one p-p-pays for p-p-prominence!" and on he rushed to greet a late comer on the other side of the room, leaving Dr. Yandell speechless for the moment.

J.T.M.

Boost and the world boosts with you,

Kneek, and you're on the shelf;

For the world gets sick of the man who kicks

And wishes he'd kick himself.

—Earl C. Hodgdon, Jr.



# † Tuberculosis †

Mrs. Lucius Ernest Smith, Louisville, State Chairman.

## "HOME HELP" AND TUBERCULOSIS

The home is usually thought of as the dwelling place for the family. The word has endeared itself to the hearts of old and young throughout the history of man. It is one place we all strive to protect from invasion by any agent or influence that might, in any way, damage or disorganize it.

Home is the place where our loved ones are. It is there we see parental love lavished on children as they grow into manhood and womanhood. In short, home is the place where men and women are made. The future of our nation rests upon the homes of our nation.

We are careful to protect our homes from those recognized enemies of home life. We would not allow a murderer or a drunken brute to enter our homes because we know the damaging influences of such intruders. Therefore, we have taken all necessary precaution against such enemies. Society has also helped us by creating wholesome community environments as an additional safeguard against these commonly recognized dangers.

There are, however, many other things to be considered in making our homes safe for our children. Most of us find it necessary to have some form of work done in our homes. We have domestic help from time to time, some of us perhaps only in house-cleaning or laundry work, while others have cooks, and still others permit paid employees to take care of their children.

Many of the most dangerous communicable diseases are especially prevalent in the negro population. In many parts of our State we depend upon negro help to supply these needs. Negro help may be dangerous unless all applicants for such work are carefully examined to exclude infectious diseases in a communicable stage. This is essential to make certain that the home is a safe place for our children.

The most common diseases spread by "home help" are tuberculosis, common colds, sore throats, parasitical diseases and venereal diseases. Tuberculosis is usually considered the most dangerous to children, and it is not uncommon to find domestic helpers with moderately advanced tuberculosis caring for small children in Kentucky homes. No help should be accepted in homes where there are children until such help has been examined by competent physicians and shown to be free from all

infectious diseases. Tuberculosis is the most dangerous because it is the most common. Then, again, it has no signs nor symptoms in the earlier stages.

Our only safeguard against tuberculosis is routine examination of all who come in close contact with the home. The Tuberculin test and the X-ray in competent hands will go far to make our homes safe against tuberculosis. The Early Diagnosis Campaign promoted by the Kentucky Tuberculosis Association in April of each year, in cooperation with the State Department of Health, offers a splendid opportunity for carrying out a well organized program along this line. Begin to think about it now and be ready to cooperate with those conducting this campaign in your own community in order that we may interest the mothers of our communities in this fight and make our homes a safer place for our children.

## Thrill to a New TASTE SENSATION!

Remember how delicious mince meat pies were when you were a youngster of ten? Now you can recapture that zest with



## LADY BETTY MINCE MEAT

Made according to the best of old fashioned recipes, it comes to you ready to put into the pit crust and serve piping hot.



## News From The Counties

### CALLOWAY

Organization Meeting of Tuberculosis Association of Calloway County sponsored by Woman's Auxiliary to Calloway County Medical Society on September 30. This meeting was held in the Murray Woman's Club House as a dinner meeting and met with Mrs. Evan L. Garrett, President of Woman's Auxiliary, presiding. Representatives of various clubs of town and county, including Mothers' Club, P. T. A., 4-H Clubs, Woman's Club, Rotary, Young Men's Business Club, and others, were present.

The following program was rendered:

Address: "Preventive Medicine" by Dr. V. A. Stilley, Benton.

Address of Welcome—Mrs. Hugh Houston, Chairman of Auxiliary Tuberculosis Group.

Greeting by Health Department—Dr. J. A. Outland, Health Officer.

Dialogue on Tuberculosis Spot Map of Calloway County—Miss Ivan, Miss Dismukes.

Response and Case Report—Homemakers Group.

Organization of Tuberculosis Association in McCracken County—Miss Rowland, Mrs. Carlson, Mrs. Craig.

Introduction of Speaker—Dr. John B. Floyd.

Dr. Ed Fisher: "Contrasted Early and Recent Stages in Treatment of Tuberculosis."

This closed the program and Dr. Hugh M. McElrath presided as temporary chairman for the election of officers as follows:

M. O. Mather, President; Judge John Clifton, Vice-President; Secretary-Treasurer, Mrs. Hugh Houston.

The Woman's Auxiliary to Calloway County Medical Society met on October 10, 1940, noon luncheon meeting at Collegiate Inn, with Mrs. E. L. Garrett, presiding.

The President gave a report on the State Meeting at Lexington, after which minutes of our last meeting were read and approved.

The Tuberculosis Chairman, Mrs. Hugh Hous-

ton, gave reports on the Tuberculosis Committee meetings which had been held since the last meeting.

Motion was made and carried that each member work at Red Cross rooms one afternoon each week.

It was planned that we should take baskets of fruit or other edibles to Tubercular patients in county.

Mrs. Fount Russell and Mrs. Hal Houston were appointed as program leaders for Jane Todd Crawford program on December 13.

In this work throughout the county Tuberculosis program it was asked that the following things be recorded:

1. Number of people contacted.
2. Literature distributed.
3. Number of hours worked.

Meeting was adjourned to meet again December 13—Jane Todd Crawford Day.

Dr. L. D. Hale and Dr. Ed Fisher have opened new offices in a beautiful new modernistic clinic building. They are to be congratulated on this advancement in the progress of medicine in Calloway County.

On Wednesday, November 20, at National Hotel, a luncheon meeting of the Tuberculosis Association was attended by members of the Medical Society and Auxiliary as well as others interested. Dr. L. E. Smith showed his new picture, On the Firing Line, which was inspiring to those present.

Mrs. Hal Houston and Mrs. Evan L. Garrett attended the Southern Medical Auxiliary meeting in Louisville.

Mrs. Rob Mason is out again after a recent illness.

The Advisory Council for the Calloway County Medical Auxiliary, appointed September 11, 1940, is: Evan L. Garrett, M.D., and A. D. Butterworth, M. D., both of Murray.

Mrs. Fount Russell is a new member of the Calloway County Auxiliary.

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## FRANKLIN

The Women's Auxiliary of the Franklin County Medical Society held its November business meeting at the home of Mrs. John G. South, on Wapping Street, Wednesday afternoon, November 6, with the newly elected President, Mrs. T. P. Leonard, presiding.

Plans were made for work in the approaching Tuberculosis Seal Sale drive; the Red Cross drive; the annual Christmas box to the Frontier Nursing Service; and for the commemoration of the Jane Todd Crawford Day in December.

The membership present included the following: Mesdames John P. Stewart, L. T. Minish, W. P. Blackburn, L. L. Cull, E. K. Martin, M. C. Darnell, Joseph Barr, T. P. Leonard, Ansel Nooe, Dorothy Hill, Jack Marshall, Will Walker Ward, Reba Burrow Flynn, John G. South, O. B. Demaree, Miss Lena Benton and Miss Helen Travis.

Mrs. Reba Burrow Flynn has been advised that her daughter, Miss Margaret Sue Flynn, who is attending school in Miami Beach, Fla., is one of three girls who were pledged to the Theta Sigma Tau sorority there. Miss Flynn has been elected secretary of her class.

The December meeting of the Woman's Auxiliary of the Franklin County Medical Society—which was a memorial meeting honoring Jane Todd Crawford—was the center of much activity as the members gathered on Wednesday afternoon, December 4, at 3:30 in the beautiful new home of Dr. and Mrs. L. L. Cull, situated on Capitol Heights and overlooking the Kentucky River.

As the members arrived, they were ushered into the study, where they placed toys and other gifts to be included in the Christmas box for the Frontier Nursing Service.

Mrs. T. M. Leonard, President, presided during the business session.

The members voted to send sheets and pillow cases before the holidays, to Hazelwood Sanatorium; to send a contribution of \$5.00 to be added to the Jane Todd Crawford Memorial Fund; to sponsor an Easter musical program in the early spring, the talent to be furnished by the Kentucky State Industrial College at Frankfort. Plans were perfected in connection with the current sale of Tuberculosis Christmas Seals in Franklin County, the publicity work of which is under the auspices of the Auxiliary.

On Wednesday morning of next week, the members are to gather at 8:00 o'clock at the home of Mrs. L. T. Minish and complete the sewing work now under way for the Red Cross such as baby caps, blankets, etc.

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The delightful features of entertainment for the afternoon consisted of the presentation of an original poem by Mrs. M. C. Darnell, which she dedicated to Jane Todd Crawford Day and which appears on page 39, and two delightful readings given by Frankfort's talented Mrs. Lucille Medley.

The dining-room of the Cull home reflected the holiday spirit. Large red candles burned from hurricane lamps on the buffet. The dining table, covered with a white lace cloth, held a most decorative oblong centerpiece of bright green pine branches interspersed with white narcissus and holly berries and tied with bright red satin ribbon. At each end of the long table two Christmas candles of red were lighted. Delicious sandwiches shaped like Christmas bells and trees were served with tea, and after-dinner mints of red and green in the shape of holly leaves.

Assisting Mrs. Cull in the hospitalities were her little daughter, Alice Ann, and her sister, Mrs. C. A. Bond.

The members and guests present included the following: Mesdames T. M. Leonard, John G. South, Joseph Barr, R. M. Fort, E. K. Martin, W. P. Blackburn, R. D. Barton, M. C. Darnell, L. T. Minish, O. B. Demaree, Will Walker Ward, Dorothy Thompson Hill, Reba Burrow Flynn, N. O. Kimbler, R. D. Medley, C. A. Bond, Miss Lena Benton, and the hostess, Mrs. L. L. Cull, and little Miss Alice Ann Cull.

Mr. and Mrs. Will Walker Ward consider "13" their lucky number, since their son, Billy, was born on the 13th day of December and celebrated his thirteenth birthday this year with a party in the well-equipped basement at the home of his grandparents, Dr. and Mrs. L. T. Minish, at 121 West Fourth Street, Frankfort. This is the second time that Billy has had a birthday that fell on Friday, the 13th. Dr. and Mrs. Minish consider it their "lucky number" also.

## GRAVES

The Graves County Medical Auxiliary held its regular monthly meeting, November 19, 1940, at the home of Dr. and Mrs. R. G. Ashley, 320 East College Street, Mayfield. Mrs. A. T. Atkins, the President, presided. The meeting opened with prayer. Roll call showed nine members present. The Minutes read and approved. Year Books were distributed. The Secretary was instructed to mail Year Books to absentees. 100% of the membership belong to the Red Cross, also and, as a body, will work with the Red Cross one day a week. The Auxiliary will assist other civic organizations, also. Plans were completed for observance of Jane Todd Crawford Day with Mrs. H. H. Hunt as hostess and Mrs. R. G. Ashley as leader. All business being dispensed, Mrs. W. J. Shelton reported the interesting happenings she enjoyed at the annual meeting of the Southern Medical Auxiliary in Louisville. Mrs. Atkins introduced the guest speaker for the afternoon, Dr. W. J. Shelton who lectured on COLDS, a timely and very instructive address. Dr. Shelton concluded his address with—to us—a most gratifying statement that he was pleased with the progress of the local Auxiliary and that the doctors' wives had filled their mission well.

Dr. and Mrs. H. A. Gilliam, Mayfield, have returned from a visit with their son, Al, in Lexington.

Dr. E. V. Edwards, formerly of the Mayfield Hospital Staff, now a resident of Kirkwood, Missouri, is in Mayfield visiting friends.

Miss Beth Page, daughter of Dr. and Mrs. M. W. Page, a student at Bethel Woman's College, Hopkinsville, attended the Grace Moore concert in Nashville, Tennessee.

Mrs. Andrew Mayer, Lowe Apartments, has returned from Nashville, where she was called on account of the illness and death of her father, Dr. James P. Womack, 79, one of the oldest practicing physicians in Nashville. The Auxiliary extends sincere sympathy.

Dr. D. H. Ray, City Physician, reported to the City Council, a total of 138 calls on the city's sick and Dr. N. M. Atkins, County Health Officer, reported a new case of scarlet fever. Proper precautions against the spread of scarlet fever have been taken.

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## HARDIN

Mrs. R. T. Layman and Mrs. George W. Woodard spent several days in Prophetstown, Illinois, in October, visiting Mr. and Mrs. C. B. Mummart and children and Professor Wendell Layman and children.

Miss Ruth Bale, sister of Dr. S. G. Bale, who held a position in Panama for several months, has returned home.

Quite a number of physicians and their wives attended the Southern Medical Meeting in Louisville.

Mrs. C. F. Long, who has been confined to her home, is able to be out again.

Dr. L. H. Layman of Holden West Virginia, has been called to military service, and will enter Fort Benning, in Georgia, about the middle of December. En route to Georgia, Dr. Layman will spend a few days with his mother, Mrs. R. T. Layman.

Dr. H. W. Hammott and Mrs. Hammott are the proud parents of a seven pound daughter, born December 7 at the Fort Knox Hospital.

Little Byron Long, youngest son of Dr. and Mrs. C. F. Long, who has been suffering from bronchitis, is much improved.

Mrs. E. E. Johnston and daughter spent the Thanksgiving holidays in Sikeston, Missouri, visiting her father, W. A. White.

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A rummage sale was held Saturday, November 29, by the Hardin County Medical Auxiliary. Due to the bad weather, only eighteen dollars was made. This sum will go for the benefit of our T.B. patients.

Plans have been made for an all-day sewing and preparations of Christmas boxes for Hazelwood Sanitarium and our needy families. This will be held at the home of Mrs. E. E. Johnston on December 13. At this time a program will be rendered in honor of Jane Todd Crawford. The Society is paying special tribute to Mrs. Lee Gross, the most elderly lady who assists in our annual sewing. Mrs. Gross will be eighty-one years of age on the thirteenth. A birthday cake and a shower of linen handkerchiefs will be given for her.

Dr. and Mrs. J. M. English and daughter and friends spent several days motoring through the Smoky Mountains in November.

Mrs. L. P. Herd, our Past President, and family, have moved to Danville, where Dr. Herd has been transferred.

A venereal disease clinic has been established in our city, by the assistance of the State Board of Health, local doctors, and an adjoining County Health Doctor. It is thought to be for a short time only, but we are hoping much progress will be made during this time.

Mrs. Anna Taber, mother of Mrs. George Bradley, suffered a broken leg October 16. She is getting along satisfactorily.

Mrs. C. F. Long's mother submitted to an operation at the Baptist Hospital several weeks ago. She is at the home of her daughter, and is thought to be improving slowly.

Mr. and Mrs. Robert Bradley and daughter, of

Chicago, spent the Thanksgiving holidays with his brother, Dr. and Mrs. George Bradley.

One of our T.B. patients, who spent four months at a Louisville hospital, has returned home.

The sale of Christmas Seals is in progress. We are anticipating a large gain in sales.

Mrs. Wm. Barnard has been on the sick list, but is improved.

Mr. and Mrs. Zack Nusz and family, of Bowling Green, spent the Thanksgiving holidays with his parents, Dr. and Mrs. H. R. Nusz.

Mrs. H. R. Nusz is spending a few days in Louisville with her brother, Dr. Guy Aud, and Miss Nancy Aud.

The Red Cross is making plans for a sewing unit for the aid of Britain. Our Medical Auxiliary plans to assist in the work.

Mr. and Mrs. Charles Searing of Chicago, were Thanksgiving guests of Dr. and Mrs. S. G. Bale.

The Hardin County Auxiliary has increased their membership by four.

Dr. Brown Pusey of Chicago, spent several days in October visiting Mrs. W. A. Pusey.

Two grandchildren of Dr. and Mrs. Nusz, who had tonsil operations, are recovering satisfactorily.

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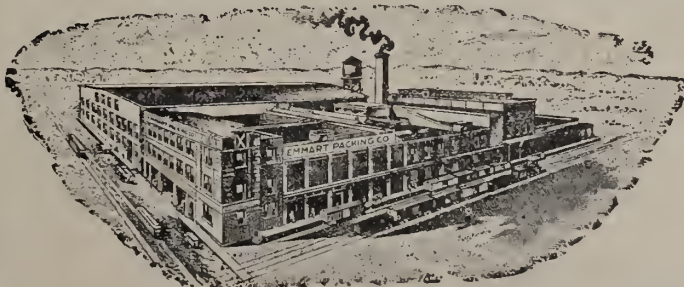
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### JEFFERSON COUNTY NEWS

The entertainment of the Woman's Auxiliary to the Southern Medical Association has been the principal occupation of the Members of Jefferson County these past months. It was gratifying to have Kentucky so well represented—167 out of a total registration of 452. We were proud of the part played by our State President, Mrs. John M. Blades, and our County President, Mrs. Richard T. Hudson, in the activities of the Southern. Many local women attended the Luncheon given by the State Auxiliary on Tuesday, before the meeting, and enjoyed the addresses by the President of the Kentucky State Medical Association and the Southern and National Auxiliary Presidents.

The Annual Luncheon was given in the Crystal Ballroom of the Brown Hotel on Wednesday with Mrs. Chas. P. Corn, Greenville, South Carolina, presiding. A Pageant of Pioneer Kentucky, written by Mrs. Joseph E. Wier and Mr. George A. Hendon, gave us glimpses of such famous Kentucky characters as Dr. Thomas Walker, Daniel Boone, George Rogers Clark, Dr. George Hartt, Dr. Ephraim McDowell, Jane Todd Crawford, John James Audubon, Abe Lincoln and Stephen Foster.

A talk by Dr. Thomas Parran, Surgeon General, U. S. Public Health Service, Washington, D. C., at the Woman's Club was followed by a Tea. The General Public Session was given that night at the Memorial Auditorium.

On Thursday, the wives of the Jefferson County Physicians entertained with a Luncheon at the Pendennis Club after which the visiting women were taken on sight-seeing trips about the city or to Bardstown to see My Old Ken-

tucky Home. The President's Reception and Grand Ball was held in the Crystal Ballroom of the Brown Hotel that evening.

In October a Card Party and Bazaar was given at the Brown Hotel for the benefit of the Benevolent Fund. Mrs. F. Parks Ogden was Chairman of Arrangements and was assisted by Mesdames Louis Hackett, Arch Herzer, J. Rivers Wright, S. C. McCoy, J. Duffy Hancock, James S. Lutz, C. G. Arnold and E. H. Koch.

The Sewing Unit had its first fall meeting at the home of Mrs. S. C. McCoy in October. Mrs. George C. Leachman and Mrs. Oscar O. Miller were hostesses at the next two meetings. Dolls and toys were taken to Mrs. Miller's home to be packed for distribution to mountain children at Christmas time.

Another honor has come to Mrs. Woodford B. Troutman, who recently won a nation-wide contest with her painting, The Refugee. She has been accepted as a new member by the Jury of the National Association of Women Painters and Sculptors.

All members of Jefferson County Auxiliary were saddened to learn of the sudden passing of Mrs. Philip F. Barbour at her home in Louisville November 28th. Mrs. Barbour was a charter member of the Jefferson County Medical Auxiliary and an active worker during the early years of this organization. We shall miss her.

The Study Class had a very interesting meeting in October when Miss Elizabeth Broecher showed a motion picture of the activities of the children of the Louisville and Jefferson County Home.

In November Mrs. J. Paul Keith gave a splendid paper entitled, Some Modern Trends, which was followed by Current Events. Mrs. Walter I. Hume and Mrs. J. B. Lukins are to be thanked for bringing us these worthwhile programs.

The Annual Luncheon and Business Meeting was held at the Brown Hotel Monday, December 2, with the President, Mrs. Richard T. Hudson, presiding. Mrs. Vincent Stabile gave a musical program following the Luncheon. Annual Reports of Officers and Committee Chairmen showed much individual effort exerted and many accomplishments achieved. Mrs. George A. Hendon, Jane Todd Crawford Chairman, received books and magazines to place in the Jane

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Todd Crawford Library at Greensburg. Mrs. Hudson then made her report of the Year's work and presented the gavel to Mrs. Bernard Asman, the Incoming President. Mrs. Asman told of plans for the coming year and announced that a board meeting would follow immediately the adjournment of the general meeting.

Invitations were received, at the time of going to press, for the marriage of Miss Helen Look, daughter of Mrs. James Percival Edwards, to Dr. Irvin Abell, Jr., on Saturday, December 28, at the Cathedral of the Assumption, Louisville.

### MADISON

The following officers were elected at the September meeting and the Chairmen of Committees have been appointed:

- President—Mrs. Shelby Gibson, Richmond.  
 Vice-President—Mrs. A. F. Cornelius, Berea.  
 Secretary and Treasurer—Mrs. O. F. Hume, Richmond.  
 Chairmen:  
 Program—Mrs. John Hunt Rutledge, Richmond.  
 Cancer—Mrs. Harry Blanton, Richmond.  
 Jane Todd Crawford Memorial—Mrs. C. E. Smoot, Richmond.  
 Tuberculosis—Mrs. Hugh Mahaffey, Richmond.  
 Hygeia—Mrs. H. C. Jasper, Richmond.  
 Publicity—Mrs. John B. Floyd, Richmond.  
 Doctor's Shop—Mrs. Robert Sory, Richmond.  
 Parliamentarian—Mrs. Robert Rice, Richmond.  
 Historian—Mrs. R. M. Phelps, Richmond.  
 Public Relations—Mrs. A. F. Cornelius, Berea.

Attended the Southern Medical Meeting in Louisville: Dr. and Mrs. M. M. Dunn, Richmond; Dr. and Mrs. Robert Sory, Richmond; Dr. and Mrs. Shelby Carr, Richmond; Dr. and Mrs. John B. Floyd, Richmond; Dr. and Mrs. C. B. Marcum, Berea.

Dr. and Mrs. Robert Rice, graduate of the University of Louisville, have moved to Richmond. Doctor Rice is doing general practice.

Dr. Robert Bateman has given up his practice and has gone into service.

Dr. and Mrs. Harvey Blanton and young daughter expect to leave for Camp Shelby, in Hattiesburg, Mississippi, after January 1st.

Dr. and Mrs. Charles Billington also expect to leave for Hattiesburg after January 1st. Mrs. Billington has resigned as Secretary of the Auxiliary. Mrs. O. F. Hume is now Secretary and Treasurer. Dr. Harold H. Rutledge will also go to Camp Shelby after January 1st.

Mrs. Bettie M. Poyntz, widow of Doctor J. M., died during the month of October.

Miss Kathleen Poyntz has been ill, but is now improved.

Mrs. Joseph Bosley is improving after a long illness.

John B. Floyd, Jr., son of Dr. and Mrs. John B. Floyd of Richmond, has been elected President of the Senior Class of the Medical Department of the University of Louisville.

C. B. Marcum, Jr., son of Dr. and Mrs. C. B. Marcum, of Berea, freshman in U. of L. Medical Department has been pledged to Alpha Kappa Kappa.

Hansford W. Farris, son of Dr. and Mrs. J. D. Farris, Richmond, was nominated a representative of Eastern State Teachers College into "Who's Who in American Colleges." Dr. Thomas Farris, class of 1940, Vanderbilt, eldest son, is interning in Rochester General Hospital.

Charles C. Rutledge, son of Dr. and Mrs. John H. Rutledge, member of the Junior Class of Medical Department of University of Louisville, has been initiated into Phi Chi Medical Fraternity.

Miss Helen Floyd, daughter of Dr. and Mrs. John B. Floyd of Richmond, has been pledged by the Delta Delta Delta Sorority, at Ole Miss,

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JEFFERSON COUNTY MEDICAL SOCIETY

University of Mississippi. Miss Floyd is a sophomore.

Forest Hume, son of Dr. and Mrs. O. F. Hume, Richmond, and Miss Thelma Baker, Berea, were married recently.

This is an excerpt from a newspaper found lining a trunk inherited by Mrs. Shelby Carr, Richmond, once owned by her grandmother.

The paper was printed in Washington in the year 1824, under the name of "The Washington Saturday Morning, under the Patronage of the General Convention of the Baptist Denomination in the U. S. A."

Quote:

"A French Physician has published a long dissertation in favor of groaning and crying. He stated that it is a very favorable symptom when an amputation takes place, to hear the patient roar lustily. His theory is this—that by these processes of nature, the superabundance of the nervous power becomes exhausted and the patient becomes more calm. He prescribed groaning all day and crying all night."

Remember this was in 1824!

#### SAMPSON COMMUNITY

The Sampson Community Medical Auxiliary met October 1, 1940, with Mrs. C. C. Howard, with ten members present. The President, Mrs. C. C. Turner, presided.

Reports from the State Meeting in Lexington were given by Mrs. Owsley of Burkesville, and Mesdames C. C. Turner and Clifton Richards, Glasgow.

Plans for our year were outlined and voted upon.

After the meeting adjourned delightful refreshments were served.

Dr. and Mrs. William Wells returned last week from a trip to New Orleans.

Mrs. H. G. Davis and Mrs. Ella Dixon were sick early in December.

Mrs. Barrick Bryant, our Secretary, has charge of Red Cross work in Barren County. She re-

**PLAID**  
B R A N D

**MACARONI or SPAGHETTI**

**PLAID**  
B R A N D

**MACARONI or SPAGHETTI**

**PLAID**  
B R A N D

**MACARONI or SPAGHETTI**

ports a very nice response, but does not have a complete report to make as yet.

Dr. and Mrs. J. W. York, Canmer, are spending several weeks in Miami, Florida.

Dr. and Mrs. W. A. Weldon have enjoyed a visit to Garden City, Kansas, to visit Dr. Weldon's brother, since our last publication.

Most all of the Doctors of this Sampson Community Association attended the Southern Medical Association in Louisville during the week it was in session, and Mesdames C. C. Truner, Rex Hayes and Clifton Richards from our Auxiliary were in attendance.

Dr. Paul S. York's office was destroyed by fire November 23. He will open a new office in the McElroy building, Glasgow, the first of December.

The Sampson Community Medical Auxiliary observed Jane Todd Crawford Day with a luncheon at Jennie Lee's Cottage Inn, with 13 members and 11 visitors present.

The President, Mrs. C. C. Turner, presided over the meeting and reported that pajamas were sent to Hazelwood for Thanksgiving. Mrs. Richards, Hygeia Chairman, gave a splendid report and a contribution for the Jane Todd Crawford project was made.

Mrs. E. Bryant and Miss Bess Howard, sisters of Dr. C. C. Howard, are visiting Mr. Billie Bryant, who is attending Medical School in Louisville.

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**PROCEEDINGS OF THE  
EIGHTEENTH ANNUAL MEETING OF  
THE WOMAN'S AUXILIARY**

to the  
**KENTUCKY STATE MEDICAL ASSOCIATION**

**Held At**

**Lexington, Kentucky, September 16-19, 1940**

(Continued from October Issue)

**IN MEMORIAM**

**Mrs. John B. Floyd:** At this time we honor the memory of one of our loyal Auxiliary members, Mrs. Clell Coleman of Harrodsburg, who passed into Eternal rest since last we met.

**Mrs. J. H. Rutledge:** What better act of veneration could we bestow upon those whom we desire to honor than to honestly resolve to live so that when the final summons comes to us, we can say we have done our best. It is not whether we have won or lost, but how we did our part—played the game of life. She, whose memory we honor today, has left us the duty of carrying-on this work in our Medical Auxiliary. We must not fail.

**Mrs. Floyd:** Realizing that mere words are futile, may we stand, reverently, for thirty seconds in silent prayer.

(Mrs. Patricia Davis at the piano.)

**REPORT OF PRESIDENT-ELECT**

It has been my duty and very great pleasure to prepare the program for the eighteenth annual meeting of the Woman's Auxiliary to the Kentucky State Medical Association. This necessitated a correspondence with many interesting persons connected with the Auxiliary work. I wrote many letters and made one trip to Lexington to consult with the chairman of arrangements at Lexington in regard to the program. As a result I feel that we have an outstanding program and I am very grateful for the splendid response given my requests. I wish to thank one and all for the co-operation I have received.

It has been an inspiration to work with our State President, Mrs. Layman, during the year. Her example of strength, loyalty and perseverance in the face of grief and bereavement has made a lasting impression upon my mind. I hope that her courage has become an integral part of the Auxiliary and shall remain so forever. Having served as President-Elect under her leadership I feel more capable of taking over the pilot's wheel when she retires from office.

Respectfully submitted,  
(Mrs. John Marcus) Anna M. Blades.

**REPORT OF ORGANIZATION COMMITTEE**

One County Auxiliary, Calloway, was re-organized, October 10, 1939, through the efforts of Mrs. H. V. Usher, Sedalia, with Mrs. E. L. Garrett, Murray, as President. Other officers were also elected and several chairmen appointed. This has been an active, effective organization throughout the year.

I wrote many letters offering to assist in organizing other County Auxiliaries but received no response.

Respectfully submitted,  
(Mrs. John E.) Lucille Dawson.

**REPORT OF HYGEIA**

The Hygeia Magazine is, as you know, a Health Magazine, edited and published by the American Medical Association and recommended to the public by the Medical profession in general.

This Hygeia Magazine has had representation in each of our County Auxiliaries for the year 1940.

We have five appointed Hygeia Chairmen, the County Presidents acting in the remainder of the Auxiliaries.

Our comparative report is hereby attached for your inspection. I hope that you will avail yourself of this opportunity, and that our work may continue to go forward in the future.

(Mrs. J. Woodville) Ida Sams.

**KENTUCKY WOMAN'S AUXILIARY HYGEIA  
SUBSCRIPTION—COMPARATIVE REPORT**

County	Quota	SUBSCRIPTIONS	
		May 1, 1938 to April 30, 1939	May 1, 1939 to April 30, 1940
Barren	20	20	16
Breathitt	6	5	6
Calloway	..	..	..
Campbell-Kenton	16	2	1
Franklin	..	..	..
Garrard	..	2	..
Graves	11	2	..
Hardin	..	..	..
Hart	..	2	..
Jefferson	105	19	24
Lawrence	6	1	..
Madison	..	..	..
Marshall	..	..	..
Monroe	..	3	..
Pulaski	..	3	..
Warren	..	..	..
Total	164	59	47

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**REPORT OF THE CANCER COMMITTEE**

In March, 1940, I sent literature from Cancer headquarters, to the 12 Chairmen whose names were sent to me by our State President, Mrs. Layman. This was followed by a letter of explanation urging each Chairman to get as many Auxiliary members as possible to work on the Cancer Drive which was to start in April. I also asked each Chairman to keep an account of the work done by her members in the Drive and send it to me as soon as the Drive was over, regardless of whether she had been asked to be Chairman by the State Commander or not, so that I could have a report for the State Meeting.

As no report had been received by August the 1st another letter was sent urging them to send me some report immediately as the meeting was just a month away. The following results were obtained:

Breathitt County—Miss Irene Hoge, Jackson. No report.

Campbell-Kenton Counties—Mrs. John E. Dawson, Ft. Thomas, reports that she sponsored speakers for 39 lecturers; collected \$27.00, distributed literature and contacted 993 people with regard to cancer control.

Calloway County—Mrs. James Outland, Murray, reports that the literature sent was distributed in various county communities. She made talks before Mothers Clubs and P. T. A. groups. Also put articles in newspapers. Mrs. Outland said she had received a letter from a man in Arkansas asking for literature on Cancer. She sent the material as requested.

Franklin County—Mrs. R. M. Fort, Frankfort, Chairman. Report given by President, Mrs. Jos. Barr, who stated that they had distributed literature, had speakers at meetings and had contributed \$7.00 to the Drive.

Graves County—Mrs. Wilbur Hargrove. No report.

Hardin County—Mrs. George Bradley reports that her husband's serious illness prevented her from carrying on the campaign. So, she sent a personal check for \$5.00.

Lawrence County—Mrs. Leslie Scott Hayes,

Louisa, sent her report in to headquarters with their County Health Officer, Dr. James O. Nall.

Madison County—Mrs. Wilson Dodd, Berea, said her Auxiliary members had taken an active part in the Drive both in Richmond and Berea in conjunction with other organizations. At their May meeting their Auxiliary voted a donation to the Drive. They also voted to keep some money in their Treasury to be used to help pay hospital expenses for indigent cancer patients.

Marshall County—Mrs. L. L. Washburn, Benton, reports that they sent to headquarters \$80.00 in the Drive, but does not know if their Auxiliary can claim any share in that as they have but two members who took membership in the Drive.

Mercer County—Mrs. Hunter Coleman, Harrodsburg, reports that her Auxiliary worked with the Women's Club and they distributed the literature through various departments of the Club. The Club voted a nice sum to the Drive.

Sampson Community Hospital—Mrs. John Dickinson, Glasgow, reports did not take an active part but had talks by Doctors and contributed \$5.00 to Drive.

Warren County—Mrs. George Wells, Bowling Green, no report.

Jefferson County—Mrs. Bernard Asman, Louisville. As Chairman I have the honor and pleasure to report that Jefferson County Auxiliary subscribed 100% in the Drive and \$68 was turned in. We received a badge of merit from the American Society for the Control of Cancer.

I sincerely regret that I have not a 100% report for the whole State but would take this opportunity to urge all Presidents to appoint a live-wire Chairman for this year for the 1941 drive. Impress it upon your Chairman that she is to keep a record of what her Auxiliary does in the Drive and send this record to me for my report as State Chairman at the next State meeting.

As members of Doctors' families what could be closer to our hearts than to feel that we had, in some way, been instrumental in giving information that might save the life of one of our

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fellow men. This can be done in many cases by the simple words that **CANCER IS CURABLE IF FOUND IN TIME**, and promptly treated if you often consult your Doctor. Many times when **YOU** know you have cancer its is **TOO** late. When in doubt consult the Doctor in whom you have so much confidence and in whom you have faith, he will not deceive you.

This is surely not a heavy nor a hard task for any Chairman as she usually has the printed material to give out if she feels she cannot explain, herself. If there is any information I can give on this matter please do not hesitate to write me.

Respectfully submitted,  
(Mrs. Bernard) Lulu Asman.

#### DELEGATE'S REPORT

**Annual Meeting of the Woman's Auxiliary to the American Medical Association, New York, June 10-14, 1940**

The eighteenth convention of the Women's Auxiliary to the American Medical Association was held in New York City, June 10-14, 1940, with headquarters at the Pennsylvania Hotel.

From the time we registered and were given our programs on Monday until we checked out on Friday, every minute was full of interest. It was a decided advantage to be a National Officer or a State President at this meeting as two of the nicest functions were given for these women only; Sunday afternoon a tea at Sherry's, and Monday evening a beautiful dinner and concert at the Waldorf Astoria.

The Business Sessions started at nine o'clock Tuesday morning, with Mrs. Rollo K. Packard, National President, in the chair. The convention was formally opened by the acting mayor of New York, Mayor LaGuardia being away for the day, which was a disappointment to many of us. There were five hundred and fifty-two members registered. On Wednesday, Mrs. V. E. Holcombe was installed in office for 1940-41 and Mrs. R. E. Mosiman, of Seattle, Washington, was elected President-elect.

On Wednesday the luncheon in honor of the Past Presidents was held in the Pennsylvania Hotel. Dr. Rock Sleyster brought the greetings from the American Medical Association, and Dr. Morris Fishbein, editor of the Journal, gave the address. Dr. Fishbein spoke on the responsibilities of women in these times of stress, and emphasized the part the Auxiliary could play. Both talks were excellent, short and witty. The piece de resistance of the luncheon seemed to be the dainty corsages at each place in which were concealed a tiny vial of Blue Grass perfume—the gift of Elizabeth Arden. Also each woman was given a ticket to an Elizabeth Arden presentation of *Beauty in the Making* at her

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Fifth Avenue Salon.

The New York Committee, Mrs. Carleton, Chairman, had arranged for many interesting features for the enjoyment of the guests. Each guest was given a strip of tickets which when presented allowed a substantial rebate on the admission price to the attractions visitors to New York find interesting.

The Convention ended with a dinner at the Pennsylvania for Auxiliary members and their husbands and a ball at the Waldorf for the entire convention.

Respectfully submitted,  
(Mrs. Jos. E.) Hilda Wier.

#### REPORT FROM THE DOCTOR'S SHOP\*

I would like for every one of you to see the Doctor's Shop while you are here, look around and see what we have and what we need. Mrs. Greene Johnson and Mrs. Condit VanArsdale, who live here at Harrodsburg, and Mrs. Wallace Chapman, who formerly lived here, are on my State Committee. We will be glad to have suggestions just how to improve and furnish the shop. We want to thank every one of you who has donated or procured something for it.

Since our State meeting last September, we have received from Mrs. Paul Woodson of Louisville, a portrait of her father, Dr. Lewis S. McMurtry. He was one of the leading surgeons of the South, a dignified, cultured Kentucky gentleman, one of the first doctors of the United States to make a specialty of Gynecology, and said to be the first surgeon in Kentucky to operate for appendicitis. He received many honors in the profession, being at one time president of the American Medical Association. He died in Louisville in 1923.

Recently Mrs. E. Lee Heflin and Mrs. Walter Hume, two of my Jefferson County Committee, went with me to the shop. Mrs. VanArsdale and another member of her auxiliary, Mrs. R. T. Ballard, met us there, and helped us arrange the things we brought, among them a very hand-

\*Given at luncheon at Beaumont Inn, September 18, 1940.

some wooden box over a hundred years old, lined with red velvet, divided into compartments, containing long surgical knives and other interesting-looking instruments. These were used by a New York Army surgeon, procured by the late Dr. James Woodville Sams and given by his wife, Mrs. Sams of the Jefferson County Auxiliary. A picture of Dr. S. T. Purcell of Glasgow, a physician and surgeon of the Civil War, was given by the Sampson Community Hospital Auxiliary. A book titled "Eve's Surgical Cases," owned by Dr. Cane Johnson Stokes, who lived near Nashville, Tennessee, born in 1835, and died in 1882, was presented by Mrs. R. G. Ashley of Mayfield. Antique fire tongs given by Mrs. J. D. Peterson of Benton were procured by Mrs. V. A. Stilley. Mrs. Mary E. Green, now deceased, gave Mrs. Paul Keith of Louisville something very old and interesting belonging to her father, Dr. George B. Calvert of Perryville—two tickets of admission to Louisville Medical Institute Lectures, dated 1841 and 1842, bearing his name. They were yellow with age, but legible. We also took a pair of mantel lamps for the mantel, donated by the chairman.

Please search your attics for appropriate things you could give in memory of our pioneer doctors.

(Mrs. J. B.) Virgie Lukins, Chairman.



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## REPORT OF HISTORICAL COLLECTIONS

The work as Chairman of the State Historical Committee of the Woman's Auxiliary to the Kentucky State Medical Society I have found most interesting.

In Kentucky we have this year thirteen active Medical Auxiliary Units with a complete roll of three hundred and six members.

I have written the President of each organization asking for a history since its organization and for biographies of the lives of doctors in their section. To these requests I have had a number of very splendid responses. For this, may I express my sincere appreciation.

Mrs. John G. (Christine Bradley) South, Frankfort, has contributed two most interesting sketches of the lives of Dr. William C. Sneed and Dr. Luke Pryor Blackburn.

Mrs. J. C. Graham, Greensburg, has biographies of about twenty physicians almost ready to be filed.

Mrs. A. T. McCormack has submitted a biography of Dr. W. K. Bowling.

Biographies of Dr. Simon Settle and Dr. Caswell C. Riggs have been submitted.

A bound copy of Volume 7, Kentucky Medical Journal Part II Woman's Auxiliary Section has been received.

We are indebted to Mrs. J. J. Adams of Glasgow for securing seventeen biographies for our files and for securing a very splendid antique walnut-framed, original photo of Dr. William Harrison Gardner, which is to be loaned to the Doctor's Shop.

Mrs. Luther Ellis of Glasgow is also offering as a loan to the Doctor's Shop a leather-bound volume, "Nunneley on Erysipelas" published 1844. This was in the library of her great-grandfather, Dr. W. J. Tuck, who came from Halifax County, Virginia, and settled in Christian County, Kentucky.

To Mrs. J. W. York of Canmer we are indebted for two kodak pictures, one of Dr. William Harrison Gardner and one of the tombstone in the cemetery, marking his resting place. She has also contributed four biographies.

Mrs. C. G. Depp, Hiseville, has contributed five or more biographies.

Sampson Community Hospital has submitted, in all, twenty-seven biographies and a history of the unit.

We have had an interesting history and report of her unit from Mrs. W. F. Dodd, Berea, Madison County.

Mrs. G. T. Fuller, Mayfield, Graves County, gives us a detailed sketch of the first State Medical Auxiliary Unit organized in Kentucky at Crab Orchard Springs, in September, 1923. The following November 6, 1924, the first County



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Auxiliary Unit was organized in Mayfield, Ky., with Mrs. Fuller, President. The history is very complete with list of officers for each year following and to date.

From Louisville, Jefferson County Medical Auxiliary, Mrs. John K. Freeman, Chairman of Historical Collection, reported in January, 1940, one hundred and sixty-one biographies of Jefferson County Physicians, with sixteen more in the process of preparation. The history of their Auxiliary organization is complete.

We are attempting, as a State, to follow the record set by Jefferson County in this very ambitious and worthwhile biographical collection. We think when it is catalogued and filed with the State Historical Collection that it will be invaluable information for future generations.

We are grateful, again may I say, to each contributor and are pleased with what has been accomplished but may we be awake and alert that we may see greater results from our efforts, realizing that "God, who makes tomorrow makes it better than today."

(Mrs. C. C.) Julia F. Howard.

### REPORT OF THE BUSINESS MANAGER OF THE QUARTERLY

Some of our Auxiliary friends in other States wonder how we can publish the Woman's Auxiliary Section of the Kentucky Medical Journal without a subscription charge. The answer is given in the audited report which will be printed in detail in this October issue of the Quarterly. (See pages 127, 128, October, 1940.)

Advertisements and Donations from County Auxiliaries and friends supply the money which finances the printing and distribution; for these we are forever grateful and recommend that all Auxiliary members read carefully the names of our Advertisers and Donors contained in the audited report.

This year there are fifty-five advertisers; twelve less than in 1939, while donations amounted to \$32.60 which is \$17.17 more than last year. Your Advertising and Business Managers have tried hard to encourage buyer response to the fifty-five ads. In January a contest was started for saving labels and sales slips, and in March a beautiful and entertaining Style Show and Advertisers' Exhibit was sponsored by the Quarterly staff. Details of the Style Show and Exhibit were published in the April Quarterly while the result of the sales contest will be announced in this current issue, October.

(See pages 112-113).

We have tried to send every Auxiliary member in the State her Quarterly regularly. Besides those sent out with the Kentucky Medical Journal, there have been 716 copies mailed individually to other Auxiliary members, Presidents and Committee Chairmen of the National and Southern Auxiliaries, and to College and Public Libraries. Briefly I shall give a summary of the report for 1940 as per audit:

Balance in bank at beginning of period.	\$ 460.12
Total amount received from 1940 ads ..	1,022.04
Collections on old accounts .....	151.25
Commissions on ads in Kentucky Medical	

Journal .....	13.98
Donations .....	32.60

Total Receipts .....	\$1,679.99
Expense of publishing and mailing	

Quarterly .....	\$1,292.97
Commission of 20% on collections amount-	
ing to \$1,123.75 paid to Mrs. J. E.	

Wier .....	224.76
Music for Style Show	

(Renee Dress Shop donated \$4.00)

(Mrs. McCoy's Cake Sale \$4.00) ..	8.00
Bank Tax .....	.82

Total Expense .....	\$1,526.55
Total balance agreeing with Bank Bal-	
ance as of August 1, 1940 .....	\$ 153.44

### Subsequent Report

Since the Audit, there has been no withdrawal. On August 29, 1940, the following collections were deposited:

Brooks Denhard .....	\$40.00
Oehrle Coal & Coke Co. ....	6.50
Hardin Co. Auxiliary (donation)	10.00
	\$ 56.50

Total Bank Balance (Sept. 10, 1940) .. \$209.94  
A donation of \$1.00 was recently received from Mrs. H. V. Usher.

Respectfully submitted,  
(Mrs. Wm. H.) Virginia E. Emrich.

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## WOMAN'S AUXILIARY SECTION

## REPORT OF THE TREASURER

Total Receipts 1939-1940 .....	\$147.57
Total Disbursements .....	145.60
Balance on year's operation .....	1.97
Balance on hand August 1, 1939, Campbell County Bank, Bellevue, Kentucky .....	\$104.11
Balance on hand, August 1, 1940, Campbell County Bank, Bellevue, Kentucky .....	106.08

## SAVINGS ACCOUNT

Louisville Trust Company, Louisville, Refunding Certificate No. 15956 .....	\$21.51
Louisville Trust Company, Louisville, August 1, 1939 .....	\$64.62
Interest .....	\$ .28
Less Government Tax .....	.06 .22

Total Savings Account Deposited in Louisville, August 1, 1940 .....	\$ 64.84
Undeposited Receipts on Hand—Payment on the Louisville Trust Company Depositors Refunding Certificate No. 14258 .....	20.06
A Jane Todd Crawford Memorial Fund of \$16.40 is included in the General Fund until such time as the amount shall warrant deposit in a separate fund.	
August 15, 1940 check to Mrs. Wm. Emrich amounting to \$20.65 representing amount which should have been paid to the Business Manager of the Quarterly instead of the General Funds held by the Treasurer .....	\$20.65
September 16 1940 amount received for Calloway County dues for 1940 .....	\$5.00
Amount on hand in General Fund September 16, 1940 .....	90.43

Total Assets .....

(Mrs. Luther) Linnie M. Bach

## REPORT OF FINANCE CHAIRMAN

From July 5, 1939 to August, 1940

## RECEIPTS

DUES RECEIVED .....	\$100.00
Transfer—Jane Todd Crawford Fund .....	10.52
For account, Jane Todd Crawford Fund .....	16.40
Advertising—Kentucky State Medical Association .....	26.92
	20.65

Total receipts (1939-1940) .....

## DISBURSEMENTS

Office supplies, Postage and Badges .....	\$ 21.62
Printing and Stationery .....	15.72
President's expenses .....	100.00
Auxiliary Sundries .....	8.86

Total Disbursements .....

Balance on current year's operation .....

Respectfully submitted:

(Mrs. J. R.) Jeanetta E. Shacklette  
Chairman of Finance

The following vouchers were presented to me by the State Treasurer for my signature:

Wachtel Co for Badges (1939) meeting .....	\$ 9.50
Mrs. A. T. McCormack for postage .....	10.52
The Times-Journal Pub. Co., Stationery .....	15.72
Mrs. R. T. Layman, President's expenses .....	50.00
Mrs. Luther Bach, for postage .....	1.00
Mrs. E. E. Fisher, National dues .....	70.00
Minish and Potts Florists, design Mrs. Heller .....	3.50
Minish and Potts Florists, design Dr. Layman .....	5.36
Mrs. R. T. Layman, discretionary fund .....	50.00

(Mrs. J. R.) Jeanetta E. Shacklette, Finance Chairman.

## REPORT OF PUBLIC RELATIONS

Your Chairman attended many meetings of Louisville Women's Clubs when health programs were being presented or discussed. Also, distributed pamphlets from the Chairman of Public Relations Committee, American Medical Association, to the different County Auxiliaries Chairmen.

We have cooperated with the Federated Clubs whenever possible and invited the Public to the Style Show and Bazaar for Advertisers sponsored by the State and Jefferson County Auxiliaries.

At the 1939 State Meeting in Bowling Green, Mrs. S. H. Flowers presented a Public Relations program during the Study Hour. Another program for a discussion of Public Relations problems will be held during this meeting.

Respectfully submitted,  
(Mrs. Jos. E.) Hilda Wier.

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### REPORT OF TUBERCULOSIS COMMITTEE TO SEPTEMBER, 1940

The Tuberculosis Committee seems to be working more efficiently this year than in previous years. The interest in tuberculosis is increasing, and the desire to do something about tuberculosis is much more in evidence now than at any other time since your Chairman has been in charge of the work.

We have more local tuberculosis chairmen in action now than we had last year, and we have more interest in local groups. There are more things being done, and it seems that we are justified in saying we can look forward to 1941 with hope and optimism.

We know that all that has been done in the fight against tuberculosis has not been reported in an official way, and we hope through the coming year our local representatives will take time to record their activities, and also be sure to report them to the State Chairman. We cannot realize the best results from our labors until we record and report them and give to others the benefit of our knowledge and experiences. We have not been able to print many County reports in the Quarterly, because we have not received them. We hope for better reporting during the coming year.

Four pages have been prepared for the Quarterly during the year. This has taken time and work, and we have tried to deal with important phases of the problem of tuberculosis control. We have evidence that these pages have been read; and we hope they have imparted knowledge, created interest and stimulated action. Recently, Hardin and Calloway counties have sent in fine reports of their activities, and we hope our Quarterly articles have in some way helped them.

There are two annual events that give us splendid opportunities for service. The Seal Sale in December gives us an opportunity for a great educational program because we can carry it into the clubs, schools and homes of our communities. At the same time, we are helping to raise funds for carrying on the fight against tuberculosis in our local communities, in our State and in our Nation.

In April of each year, the Early Diagnosis Campaign gives an opportunity for another educational and case-finding drive. At this time we spend the funds raised in the December Seal

Sale, and again we educate the people. We should take advantage of both of these splendid opportunities, and we hope to join heartily this year in the Seal Sale. Mobilization of troops, as well as men and women in industry, will create new health hazards. We must have the money to carry on a larger program than in previous years.

During the year appropriate literature has been sent to local groups through our chairmen. More than seventy letters have been written in behalf of the work, and all requests for advice have been answered.

Your State Chairman regrets that the work has been carried on under difficult circumstances and asks your indulgence for the omissions that may have hindered our progress.

Respectfully submitted,

(Mrs. L. E.) Beulah G. Smith.

### THE DOCTOR'S WIFE\*

Austin Bell, M. D., Hopkinsville

President Kentucky State Medical Association

I deem it a signal honor to come before this body of Kentucky women and pay tribute to their unselfish devotion to duty and worth in the community life of every section. Especially, do I honor the country doctor's wife whose burdens are numerous and if possible exceed those borne by the doctor in that location. Surely hers is a trying life and her potential position socially and economically can not be surpassed in that community.

It is indeed a versatile woman who can successfully meet the exacting requirements from day to day. She is not fortunate enough to have an eight hour shift—rather is it a twenty-four hour day—crowding into that time duties abundant and varied and only those of like opportunities can visualize her taxing tasks and unusual experiences. A rare and accomplished exponent of the culinary art, she must prove a financier of capacity and versatility to balance the family budget with the delayed and delinquent donations.

The doctor engaged in active work who fails to have a help-meet of the worthier type is greatly handicapped and is indeed an exceptional man who fully meets the requirements and fulfills his responsibilities alone. On the

\*Address, First Business Session, Annual Meeting, Woman's Auxiliary, September 17, 1940.

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other hand how many men have made eminent successes in their respective communities due to the judgment, tact, discretion, unselfishness and varied accomplishments of versatile women! The sacrifices they make, the lonely hours they spend, the lack of companionship at all hours they suffer, the drudgery and disappointment in making appetizing and palatable, a delayed and warmed-over meal for the uncertain husband—all without resentment or complaint—place them in positions peculiarly their own—unoccupied by other women. The ready smile and the cordial greeting of the patient who partakes of the doctor's meal—at his request, without realizing the additional trouble occasioned thereby—stamp her as one of a finer mold.

Attention to the various calls that came by messenger—before the days of telephone—and since its advent, the numerous demands on her time by it indeed make her life burdensome. The same cheery smile and kindly word to prince and pauper—white and black—old and young—must be given, and the ready response to door bell and telephone would tax the patience of a Job; but, a greater than Job is she.

In the passing of the years and with the modern conveniences and conveyances, the rapidity of transportation, and time saving devices of every nature—greater exactions are made on her time and talents, for no longer are patients as loyal to their doctors as in the past. The profession is graded by most individuals and if the doctor of choice is unavailable, the second on the list is called and so on down the line. Usually those least dependable and poorest remunerators are the most unreasonable in their demands and are ever seeking a slight or questioning actions and motives. From such as these do many of our night calls come. The illness may have existed for hours and the service could have been rendered before the shadows had fallen yet any suggestion to that effect would arouse antagonism and occasion resentment.

She is indeed a good psychologist who meets the many emergencies successfully and smooths the pathway of the irascible patient. She must ever be on guard, for constantly she is questioned relative to sickness and happenings in the doctor's routine and her answers too often prove sweet morsels to questioning lips, only to be repeated and distorted until unrecognized after several repetitions. There is no subject too delicate to discuss, no intimacy too sacred to seek. Those individuals who unhesitatingly ask concerning the illness of others would be the first to criticise and resent the doctor or doctor's wife who discusses their problems. The doctor and doctor's wife—who have the reputation of never divulging his patients' ills are often sought for that very reason.

How frequently the doctor's wife or children are sick, and exacting patients selfishly ignore their needs and occasion their neglect in his response to those less ill. Who can doubt the crown of glory prepared for such—wives, mothers and community friends, or who dares to question their future status? Words are inadequate to express proper appreciation of noble Christian women who through the ages have filled their responsible positions so satisfactorily. Their children often demonstrate the fibre of which they are made and in their contribution to society are living examples of the impress that Christian Motherhood makes on a Nation. Certainly the virtues and attributes of our outstanding citizens in every walk of life, the statesman, scientist, financier, minister, lawyer and Christian physician may point with pride to a God-fearing and praying mother. Nor is she content to neglect any effort that might contribute to the spiritual development of that child. She realizes that a sound mind in a strong body is necessary for maximum results and she instills honor, love, chastity, restraint, usefulness and the daily communion with Him who directs all things; wisely and well. Her tasks also include those things that tend to physical development, supplies a balanced diet from the day of birth until that duty is given to another. Nothing is too insignificant and left undone that may prove helpful, from the kissing and curing of imaginary ills of the young, to giving an attentive ear to the adolescent in his or her problems, and finally until the real issues of life are shared with Mother from whom advice, counsel and encouragement must come. She recognizes the benefits from a well trained mind and saves, sacrifices and suffers that her boy or girl may be furnished every opportunity to cope with the problems of life in which an education is such a vital factor. Often additional duties are assumed that the family budget may be increased.

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Surely a Mother's love is capable of stimulating the loftiest flight of fancy in the poet as well as the most eloquent expressions of love and gratitude from the pen and tongue of those who write and speak. Today and at all times, we delight to honor the Christian women of our land who are the guardian angels of infant, child, boy and girl and the inspiration of true manhood in every walk of life. May she remain pure and free from spot and blemish and may she continue to dominate the lives of men is our wish and prayer, for only then will manhood equal the challenge that comes from her unselfish life and sacrificial devotion to duty.

May we not indulge the thought that the greatness of the medical profession comes largely from such noble mothers and wives.

(Proceedings Concluded in April Issue)

### THE FEATHER BED

Mrs. M. C. Darnell, Frankfort

"You first take off all covers and the sheets,"  
Grandmother said,  
Instructing me, a child, in making up a feather bed,  
"And turn the bed **entirely over each time**—do not fail,  
Or you'll be judged a slattern, and be quite beyond the pale."

\* \* \* \* \*

Dear Grandmother has been a memory for many a year,  
And with her passed her feather beds, and much that she held dear.  
And now I like in histories the past years to review,  
While radio and movies bring old scenes as well as new.

They tell of Jane Todd Crawford, that brave heroine of the knife,  
Of the famous operation that endowed her with new life,  
So that upon the fifth day, when the doctor came in dread,  
He found his erstwhile patient dressed, and making up the bed!

We know that she was noble, conscientious, fine and good—  
An example to her sisters of intrepid womanhood.  
But I have often wondered—the historians never said—  
Did she really turn over, that fifth day, her feather bed?

Every bit of information we get is just one more window into the Infinite.

## WOMAN'S AUXILIARY

to the

### SOUTHERN MEDICAL ASSOCIATION

1940-1941

NEXT MEETING, ST. LOUIS, NOVEMBER, 1941

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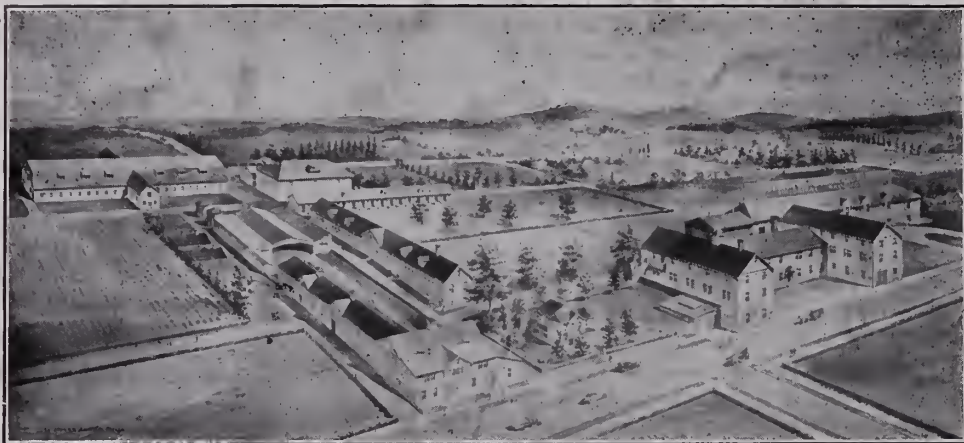
Fatigue poisons the body. The first thing to do when tuberculosis threatens is to take absolute rest.

Children who have tuberculosis should not go to school. They need absolute rest. Open Air Schools are to prevent the disease, not to cure it.

A child may be well though underweight. But look well after the care of the underweight child who is evidently not well.

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**TYPHOID FEVER CAN BE PREVENTED** by the use of Typhoid Vaccine (plain or combined).

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KENTUCKY MEDICAL JOURNAL—PART II  
WOMAN'S AUXILIARY SECTION

*The Refugee*



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# KENTUCKY MEDICAL JOURNAL—PART II

## WOMAN'S AUXILIARY SECTION

Published Quarterly Under the Supervision of the Advisory Council

Vol. X, No. 2

Bowling Green, Kentucky

April, 1941

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### PLANTING TIME

Have you any trees, plants, shrubs, bulbs or seeds for the Jane Todd Crawford Trail? Everything that you wish to sort out of your garden will be welcome, particularly iris and other hardy plantings. Send direct to Mrs. R. L. Durham, Greensburg, or to Mrs. George M. Barbee, Campbellsville. Or, notify Mrs. A. T. McCormack, Brown Hotel, Louisville, and arrangements will be made to transport your offerings.

### PRESIDENT'S MESSAGE

Mrs. John M. Blades, Butler

In the words of Henry Timrod, "Spring with her golden suns and silver rain, is with us once again." Spring always makes us happy. It cheers our hearts and gives us a new inspiration to work harder and to rise above the memories of hopes unrealized. Our work has been somewhat interrupted by the need for knitting, sewing and talking for national defense, but I am glad that you have also found time for efforts to help eradicate influenza, tuberculosis, cancer and venereal diseases. We appreciate the reports from Mrs. E. L. Garrett and the work that the Calloway County Auxiliary is doing to banish tuberculosis from the county. Franklin County Auxiliary has done marvelous work with health projects during the year. I am sure other Auxiliaries will have much to report later. I have been proud to answer several inquiries from Auxiliaries of other States concerning different phases of our work.

Our Board Meeting will be held in Florence on Friday, April 25th at the Lloyd Memorial Home at one o'clock (E. S. T.). The Lloyd Society has consented to serve a luncheon at that time.

As a member of the Interstate Committee for the session of the Woman's Auxiliary to the American Medical Association, I am relaying to you an invitation from our Convention Chairman, Mrs. Fred Oldenburg, to come to Cleveland, Ohio, June 2-6. We hope that many of you will find it possible to attend this meeting of the Auxiliary to the American Medical Association. One cannot fail to receive inspiration for greater service at these assemblies. That makes our State organization stronger.

I am sure that all of the members of the Auxiliary to the Kentucky Medical Association who were able to attend the style show in Louisville March 11th enjoyed it. We appreciate the efforts of Mrs. Dahlem and the other members of the Jefferson County Auxiliary who spent so much of their time and energy to arrange this very enjoyable affair.

May 30th will be Doctor's Day in Kentucky this year and the "Country Doctor" will be especially honored. Let us make all doctors living in Kentucky happy on that day and let us pay

(Continued on page 46)

## -:- EDITORIALS -:-

### A. M. A. MEETS IN CLEVELAND

All Cleveland extends a hearty welcome to you, Auxiliary Members, and to your husbands for the Annual Convention of the American Medical Association and Auxiliary. Have you made your reservations yet? If not, remember that Hotel Carter will be the headquarters for the Annual Meeting of the Woman's Auxiliary to the American Medical Association which will be held in Cleveland, June 2-6, 1941. Requests for reservations should be sent immediately to Dr. Edward F. Kieger, Chairman of the Committee on Hotels and Housing, 1604 Terminal Tower Building, Cleveland, Ohio.

### AUXILIARY ACCEPTS DEFENSE TASK

The Jefferson County Auxiliary is making plans to cooperate with the other Women's Organizations in the City of Louisville, on two Defense Plans: To beautify the grounds around the new Hospital base at the Bowman Field Airport, and to help in the entertainment of soldiers at the Service Club, Columbia Auditorium. The plans, according to Mrs. Bernard Asman, President of Jefferson County Auxiliary, will entail much work and some expenditure of money, but her organization has accepted the added task willingly and expect to be ready for service soon.

### CANCER DRIVE

The Annual Drive for Members in the Woman's Field Army of the American Society for the Control of Cancer begins April First and continues throughout the month. Every wife, daughter, mother and sister of a physician should be enrolled in this Army Fighting Cancer, and, they may be enrolled by paying One Dollar for cancer control and education of the laity. Proud of Auxiliary activities, they may enroll through the Cancer Chairman of their own County Auxiliary or, where there is no local Auxiliary organization, send One Dollar to the State Auxiliary Chairman, Mrs. Bernard Asman, 2200 Boulevard Napoleon, Louisville.

Cancer Chairman are found in almost all women's clubs, as well as in the Medical Auxiliary, for all women are eligible, and the final returns will be made to the State Commander of the Woman's Field Army in Kentucky, Mrs. T. C. Carroll, Louisville, who will report to Mrs. Marjorie Illig, National Commander of the Woman's Field Army of the American Society for the Control of Cancer, New York.

### A NEW PUBLICATION

We are all delighted with a new publication, giving new information, along with the remarkable old story, about Jane Todd Crawford and the effort to memorialize our Pioneer Heroine of Surgery. It comes from the pen of Mrs. Luther Bach, Bellevue, Kentucky, Chairman of the Jane Todd Crawford Memorial Committee of the Woman's Auxiliary to the Southern Medical Association. This neat 5-page pamphlet is published by the Southern Medical Association, Alabama, and will greatly aid in spreading knowledge that will assist in the effort to develop a suitable memorial by the Southern Medical Auxiliary.

### JTC CABIN MODELS IN SCHOOLS

Late in November, following consultation with Mr. John Brooker, State Superintendent of Education, Frankfort, a plan was developed for the distribution of 100 models of the Jane Todd Crawford Cabin, purchased from the State Wide Museum Project of WPA by the Jane Todd Crawford Committee of the State Medical Auxiliary.

To the Principal of the 100 schools selected, there were sent four items for a contest: a copy of the plan together with a letter of explanation and a copy of the radio dramatization of the Jane Todd Crawford story written by Mrs. S. H. Flowers. And, under separate cover, a model—plastic composition—of the Jane Todd Crawford Cabin.

The plan was for a contest in telling the Jane Todd Crawford story, in one of two forms—either a playlet or an essay. Judges to select the best essay or playlet from each school were to be named by the Principal. This was to be taken to the local newspaper for publication by the Principal, or Teacher, and a copy of this publication sent before February 15, to our State Chairman of the Auxiliary. The model of the JTC Cabin was to be awarded by the Principal to the class room of the winner for all time.

From those finally submitted, by the Principals, the State Auxiliary Chairman requested three judges to select the best playlet and the best essay. These judges were: Mrs. John M. Blades, State President; Mrs. John G. South, State President-Elect; Mrs. Luther Bach, Jane Todd Crawford Chairman of the Woman's Auxiliary to The Southern Medical Association.

Unfortunately, some excellent contributions had to be ruled out as they included the erroneous story about a "mob" which is, like many misstatements, persistent in making its appearance. No one, who has done actual research on



the life of Dr. Ephraim McDowell and Jane Todd Crawford, can find any authentic data concerning the "mob story" which made its first appearance about 1870, long after both Dr. McDowell and Mrs. Crawford had died.

The truth is what the Jane Todd Crawford Memorial Committee is trying to perpetuate, and, until the "mob story" is proved a truth, credit cannot be given to such reflection on pioneer men and women of Kentucky, who, like other men and women of that time did not discuss, freely and openly as we do today, the ailments peculiar to women. Rather, did they conceal all such afflictions, as much as possible, for, at that time, disease was considered to be a punishment of God. Conversations concerning conditions peculiar to women were, when discussed at all, always discussed behind closed doors, in hushed tones, and never in a mixed company of men and women. Quite a contrast to our "speaking of operations," today!

The winning playlet by Miss Alice Christen is reproduced on Page 58. The winning essay by Miss Margie Roberts, Campbellsville, and the playlet and essay given Honorable Mention, by Shelby Warren, Hazard, and Mary Lou Nelson, Paintsville, will be published in an early issue.

### THE DOCTOR'S WIFE

At the Annual Luncheon of the American Medical Auxiliary in St. Louis, 1939, Dr. Rock Sleyster, the In-Coming President, made a gracious and inspiring address which left a deep impression upon all who heard it. Recently, the Public Relations Committee of the American Medical Auxiliary has had this address printed in the form of a little booklet, entitled "The Doctor's Wife." Copies may be purchased for gifts or favors or for general distribution by writing the Magazine Printing Company, 62 Richards St., Salt Lake City, Utah, enclosing check for \$1.50 for 50 copies or \$2.85 for 100 copies. Every doctor's wife will be happy to have a copy of this attractive booklet.

### OUR BUSINESS

Mrs. Wm. H. Emrich

#### Advertisers' Exhibit

On Tuesday, March 11, 1941, the South Annex to the Crystal Ballroom of the Brown Hotel was converted into an attractive Country Store. The transformation was almost magical, as though some fairy's wand had summoned a lovely fantastical spectacle to appear.

There were tables of food in clean, bright, colorful labeled cans, jars, bottles, cartons and packages, delicious cakes and pastries temptingly displayed. There were also artistic arrangements of exquisite china, glassware, ornaments, novelties, dainty pieces for gifts and practical use and a vase filled with gorgeous Spring flowers. There was a table of health producing vitamins, a giant's dose in a huge amber globule, healing herbs and powders supplied by five of our druggist advertisers. All these held interest of approximately 500 persons who thronged there to taste, to sample, to see and to learn from these interesting exhibits.

There were charming women dressed in gay gingham and calico frocks, pinafores, aprons and sunbonnets standing by to help "customers" to samples, souvenirs, leaflets, color charts, blotters, note books, pocket calendars and redeemable coupons while these "customers" made mental notes of the names of our Advertisers posted over their respective exhibits.

We thoroughly enjoyed the day planned for Our Advertisers; it was one way to show appreciation for their loyalty to the Quarterly and the Advertisements they give us. It was our "Big Thank You" to the Advertisers. Now we have other plans in progress for helping them.

#### Advertisers' Contest

All members of the Woman's Auxiliary may enter the contest now, which will close at the Annual Meeting of the Woman's Auxiliary to the Kentucky State Medical Association to be

*You enjoy eye comfort when  
your glasses are made to the  
prescribed correction.*

*We make and fit your pre-  
scribed glasses to conform to  
your facial characteristics.*

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- Hats
- Coats
- Sportswear
- Hosiery
- Bags

Louisville, Ky.

held in Louisville next September.

We have a few simple rules for entries:

#### Rules For Contest

1. Use the Quarterly as a shopping guide; buy from our Quarterly Advertisers.

2. Save all Labels, Wrappers, Bottle and Jar Caps which identify our Advertisers with these articles. Save Sales Slips and Receipts.

3. These may be sent to the president in your own county who will keep a record of all sales evidence until the final report is given to Mrs. Wm. H. Emrich, 842 So. Second St., Louisville.

4 All entries must be sent in before September 1, 1941

5. Credit will be given for purchases from the greatest number of Quarterly Advertisers.

6. Credit will be given to contestants entering from the farthest points in the State.

7. Credit will be given for the greatest number of items purchased.

8. Credit will be given for the greatest amount of money spent with our Advertisers.

9. After entries are counted and credited to the Contestant, the judges' decision will be final.

10. Awards will be announced in the October Quarterly.

Prizes are donations from our Advertisers, including a new HAT from Clara's Hat Shop and a BASKET of Lady Betty Foods from Wheatley Mayonnaise Company.

#### PRESIDENT'S MESSAGE

(Continued from page 43)

tribute to those who have passed away. Men of no other profession perhaps so sincerely give their lives that others may live. Whether they enjoy the formality of taking a cup of tea with us on that day or not, they will be glad that we appreciated them enough to ask them and shall probably leave us with that "inward glow of celestial fire" a little brighter than when they came.

Fine China, Glassware, Art Goods

## Dolfinger China Co.

Incorporated

325 W. Walnut St., Starks Bldg.  
Louisville, Kentucky

#### WHY?

If radio's slim fingers  
Can pluck a melody  
From night, and toss it over  
A continent or sea;

If the petaled white notes  
Of a violin  
Are blown across the mountain  
Or a city's din;

If songs, like crimson roses,  
Are culled from this blue air,  
Why should mortals wonder  
If God hears prayer?

—Edith R. Fuller in The New Hampshire  
Troubadour for January, 1941

#### EXECUTIVE BOARD MEETING

The Executive Board of the Woman's Auxiliary to the Kentucky State Medical Association is called by the President, Mrs. J. M. Blades, for a meeting on Friday, April 25, at the Lloyd Memorial Home in Florence, the "Stringtown On The Pike" made famous by John Uri Lloyd, and located at the junction of Highway 42 and the Dixie Highway.

Luncheon will be served by the Lloyd Society, a Woman's Club, at 12:00 o'clock, Central Standard Time, at One Dollar per plate. Reservations may be made with Mrs. W. R. Stith, Florence, Kentucky.

The Lloyd Memorial Home is now a museum containing articles collected from all over the world.



Colonel Golden Tip says:  
For motoring satisfaction, use  
VISCOYL Motor Oil  
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**STYLE SHOW AND ADVERTISERS BAZAAR****Mrs. Joseph E. Wier, Louisville**

A Luncheon Style Show and Advertisers Bazaar, for the benefit of the Quarterly Advertisers was held Tuesday, March 11, in the Crystal Ball Room of the Brown Hotel, Louisville. A large attendance, including many Auxiliary Members and guests from outside Jefferson County, enjoyed the occasion, among these, Mrs. John M. Blades, our State President, who came from Butler and brought three Auxiliary Members with her. Madison County, Franklin County and Hardin County Auxiliaries were well represented, the largest group, sixteen, coming from Hardin County with Mrs. R. T. Layman.

DURAND'S, Women's Apparel, Walnut between Third and Fourth Streets, showed a notable collection of hats, gowns and accessories. The shoes from BAYNHAM'S, 639 South Fourth Street, ranged from the practical oxford to a fragile Vinlyte evening pump with gold trim.

A garden scene made a beautiful setting for the models. Mr. Bartlett, Manager of KENTUCKY TENT AND AWNING, 337 West Main, was kind enough to lend us the distinctive umbrella, table and chairs. SIGN OF THE PINE TREE, 327 West Broadway, loaned the decanter, from Finland, attractive glasses, and other accessories necessary for serving cold drinks properly. The Everett organitone furnished music for the occasion.

The models were Mesdames: Irvin Abell, Jr., C. Melvin Bernhard, Ellis Duncan, Louis Hackett, John M. Keaney, Oliver H. Kelsall, John A. Lewis, A. Clayton McCarty, Stephen M. McCoy, Marvin Mohlenkamp, Harold F. Miller, T. Cook Smith, and Maurice Thompson. Misses: Helen Floyd, Richmond, Jean Bowen, Patty Johnson, Alice Nusz, Elizabethtown; Mary Pat Asman, Evelyn Hackett, Betty Lancaster, Ann McCarty, Helen Brunson Stites, Louisville.

At the conclusion of the Style Show, draw-

ings were held to determine the lucky winners of the handsome door prizes donated by our Advertisers. Following is the name of the firm donating the prizes, the prizes, and the winners: Artic Ice—Ice Box...Mrs. F. H. Linkenberg Baynham Shoes—Pair Shoes—

.....Mrs. Wilson Smock  
Cake Box—Cake.....Mrs. C. E. Reed  
Emmart Packing—Ham....Mrs. Carl Johnson  
Dolfinger China Shop—Bowl..Mrs. Wm. Dowden  
Hampton Crackers—Boxes of Cakes and Crack-  
ers.....Mrs. A. M. White  
Hirsch Bros.—Basket of Products—

.....Mrs. James B. Connelly  
Hulscamp Drug Store—Evening in Paris Per-  
fume.....Mrs. John Cocke  
Kentucky Macaroni Co.—Vanity..Mrs. J. Love  
Kentucky Macaroni Co.—Vanity

.....Mrs. Stafford McKenna  
Kroger Piggly Wiggly—Coffee

.....Mrs. M. C. Applegate  
Kroger Piggly Wiggly—Coffee

.....Mrs. J. C. Gordinier  
Kroger Piggly Wiggly—Coffee

.....Miss Grace Stroud  
Kroger Piggly Wiggly—Coffee

.....Mrs. C. Melvin Bernhard  
Louisville Apothecary Shop—Hot Water Bottle  
.....Mrs. M. Bolton

**ICE CREAM****A Health Food**

**"BUTTERMANN  
Cream Ice Cream"**



**"HOLLENBACH  
Pure Ice Cream"**



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ICE CREAM COMPANY**

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Louisville, Kentucky

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**Exclusive Prescription Specialists****C. F. CHAPMAN, Manager**

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Louisville**

**BUSH-KREBS CO.**  
INCORPORATED  
ARTISTS, ENGRAVERS,  
ELECTROTYPERS  
LOUISVILLE, KENTUCKY

**I DO NOT GO ALONE****Maude Cartwright Telford \***

I go—God Goeth, Too!

I do not go alone,

And so I do not fear the unknown way,  
 For in the midnight hour, I hear God say:  
 "I will be with thee, with thee all the time."  
 This is the music of the old year's chime—  
 These are the bells that ring the New Year in,  
 Heaven's holy peal, across a world of sin—  
 I go—God goeth too!  
 I do not go alone  
 Into the path untrodden and unknown.

\*Mande Cartwright, Superintendent, Norton Memorial Hospital, Louisville, 1898-1900, received her Nurses Training in Belfast, Ireland, where she was born. Practised in Ithaca and Rochester, New York, before coming to Louisville. Married Mr. John J. Telford, 1900. Died, 1936. This poem was found, after death, among her things. Secured by Mrs. H. E. Tuley from Mildred Telford Barnwell, Louisville.

Medical Arts Prescription Shop—Thermometer  
 .....Mrs. R. Carson  
 Minish and Potts—Flower. .Mrs. William Adams  
 Porter Paint Co.—One Quart Enamel  
 .....Mary Amlie Holt  
 Sign of Pine Tree—Bowl and Tray  
 .....Mrs. R. B. Holt  
 Southern Optical Co.—Pair Fitted Sun Glasses  
 .....Mrs. Charles Birnsteele  
 Wheatley Mayonnaise—Lo-Calorie  
 .....Mrs. Frank Simons  
 Wheatley Mayonnaise—Lo-Calorie  
 .....Mrs. Maxwell Glen  
 Wheatley Mayonnaise—Lo-Calorie  
 .....Mrs. H. J. Kiefer

Other firms participating in the "Country Store" exhibits were Butterman Ice Co.; Grocer Baking Co.; Kentucky Hospital Association; Louisville Crematory; Meffert Equipment; Premier Paper; and Stoll Oil Co. The College of Pharmacy had an unusual exhibit for the druggists displaying the proper cooperation between physician and pharmacist.

After our show, I heard several women commenting on the day's activities. One remark heard many times, was that it was so much smoother than our previous Advertisers Day Programs. I think this was due, in large part, to the splendid work done by the members of both the Jefferson County and the other County Auxiliaries. All cooperated better than ever before—and that made a nicer party. The Staff of the Quarterly is appreciative of this help. Thanks!

Our grand business undoubtedly is, not to see what lies dimly at a distance, but to do what lies clearly at hand.—Carlisle.

**CANCER CONTROL****Mrs. Bernard Asmen, Louisville, Chairman****JOIN THE ARMY NOW****AND FIGHT CANCER**

Every wife, mother, daughter, sister and widow of a physician should be an active member of the Woman's Field Army of the American Society for Cancer Control. Annual dues, one dollar, now payable through your own Auxiliary Chairman, or may be sent to the State Chairman, Mrs. Bernard Asmen, 2200 Boulevard Napoleon, Louisville.

Then, altogether, "Fight Cancer With Knowledge," by telling everybody that cancer is curable if found early and treated properly by a good physician.

**FIRST GERTRUDE HELLER MEMORIAL****A Free Bed For Negro Cancer Patients****At Red Cross Hospital, Louisville**

On Sunday afternoon January 12, the Negro Division of the Women's Field Army for Control of Cancer dedicated a bed for indigent patients at the Red Cross Hospital in a memorial service for Mrs. Gertrude Heller, late State commander of the field army, who was killed in an automobile accident last spring. Mrs. Alice Crutcher, vice State commander, in charge of the Negro division, presided.

More than fifty civic leaders, Negro and white, attended the services at the Negro hospital at 1436 S. Shelby. Prof. George F. Robinson, Jr., of the Louisville Municipal College, principal speaker, outlined the work of the organization, and stressed the value of increased emphasis on public health in recent years.

**Kentucky Work Praised**

Mrs. T. C. Carroll, Shepherdsville, present State commander, said the cancer control, as every other public health project, was national defense work. She praised the enterprise of the

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Negro division, adding that the plan followed here was copied in New York and other States.

Mrs. T. L. Brown joined Mrs. Carroll and the other speakers in paying tribute to Mrs. Heller's "persistent, unselfish and unflagging efforts" in behalf of the cancer control program.

Dr. J. Duffy Hancock, a member of the State executive committee of the American Society for the Control of Cancer said the free cancer bed was financed largely by contributions from the Negroes, "the low income group usually least able to make contributions."

"You should be proud that you are the first organization to create a memorial to Mrs. Heller," he added.

Dr. Wallace Frank, also a member of the executive committee, called attention to the fact that "on this side we of all races and creeds" are united in fighting disease. Mrs. A. T. McCormack, representing Dr. McCormack, State Commissioner of Health and a member of the executive committee, spoke briefly.

The Rev. W. Augustus Jones dedicated the bed and Mrs. B. P. Whedbee made the response. She read a telegram from C. C. Little, managing director of the American Society for Control of Cancer, regretting that the national society could not be represented personally and paying tribute to Mrs. Heller and thanking "those who are creating this memorial to her."

The Rev. D. Hughlett gave the benediction. Mrs. Anna Mahan sang two solos.

## KIND WORDS ARE SWEET MEMORIES

Reba Burrow Flynn, Frankfort

Words that fall from the lips of love

Are treasures deep and rare,

That I weave into a golden chain

Of memories, to wear

When love and youth shall fall asleep,

Like the sunset at evening tide;

And I am alone with my memory-chain

In the haunts where love did abide.

## A NURSE'S POINT OF VIEW

Mrs. Henry Enos Tuley, R. N., Louisville

"Sick people need rest," emphasizes the Nurse.

One may be sure, the Doctor agrees with her, that visitors—even though well-intentioned—do more harm than good to the sick. Rest aids restoration of bodily health.

If relatives and friends would show their love and sympathy by sending frequent short notes or post cards, the patient would enjoy their thoughtfulness and attention without the fatigue incurred by greeting people and the excitement of conversation. Too, fewer visitors might shorten the illness, so that the patient would not need to spend so long a time in the hospital, thereby reducing expenses.

Again, too many flowers are not advisable. Flowers, in the large quantities usually sent, exhaust the oxygen in the room. The average hospital room has not sufficient space to place a lot of vases and the room often looks overcrowded. If the patient is really very ill, requiring constant care, flowers become a burden or have to be neglected. For, flowers need care, too. And, while some hospitals have an attendant to care for the flowers, change the water, discard faded blossoms and re-arrange often, this task usually falls to the Nurse. A few blossoms look lovelier than a crowded vase, anyway.

In one hospital, so many friends visited the Ward Patients that the Board was obliged to limit visitors to two near relatives or friends.

One sometimes knows of a person walking, unannounced, into a room saying, "I saw the sign—No Visitors—but I knew you would see me." That puts the responsibility on the Nurse and she must run the risk of incurring dislike by trying, tactfully, to get rid of the intruder. This is not always easy to do.

Visitors should not go directly to the room of a patient without inquiring first—at the Supervisor's desk in a hospital—if it is convenient for the patient to have a caller. Frequently, it is distinctly inconvenient.

Sick room ethics are not for Doctors and Nurses, alone. Ethics are quite as imperative for friends and relatives when visiting the sick. The welfare of the patient should be the first consideration, always. And, sick people need rest.

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## News From The Counties

### CALLOWAY

Dr. and Mrs. L. D. Hale have returned from a much needed rest and vacation, including Mayo Clinic on their trip.

Mrs. A. D. Butterworth has recovered from a bad case of the "flu" which was more severe with her daughter who had pneumonia.

Doctors Fount Russell, Hal Houston, J. C. McDevitt and Evan Garrett have spent the two-week period required by the Army for the Reserve Officers to examine the Guard. Dr. Russell will remain for a year.

The Murray State Teachers College has supplied their loss of Dr. Russell with Dr. Butterworth. We will miss Nancy Russell at our Auxiliary Meetings.

Mrs. Hal Houston has unknowingly held up the Auxiliary banner in the Red Cross work. She has been untiring in her efforts to a worthy cause.

Mrs. Hugh Houston spent several days this month in Nashville where Dr. Hugh has been at Vanderbilt for rest and treatment.

Mrs. Evan Garrett has had her small son, Bob, at Vanderbilt for further treatment of his food and pollen allergy.

Calloway County invited members of the Auxiliary and guests of District No. 1 to a dinner meeting at the Women's Club, Murray, February 20. The guest speaker was Dr. Austin Bell, the President of State Medical Society. His subject was, "The Doctor's Wife," and how she can help in the public health situation today. We surprised Dr. Bell by inviting the Medical Society, also, and were proud of an attendance of 40 for his fine address.

Illness has kept many of our members from being very active since the State Meeting. We hope as the weather becomes more favorable we will show more signs of activity and growth.

There are many new T. B. cases being reported since the beginning of the campaign in Calloway. Our county was complimented on the work of the Auxiliary in T. B. work at the Jackson Purchase Public Health Meeting at Paducah, February 10. We want to enter some kind of a poster for the contest at State Meeting. Our

Committee will have something to offer.

Calloway Auxiliary is fortunate in having two women doctors, Dr. Ora Mason and Dr. Katherine Fisher. Dr. Fisher's paper on "Use of Pentothal Sodium in a Small Hospital," has been accepted for publication by the Kentucky State Medical Journal.

Dr. and Mrs. C. H. Jones, Lynngrove, have gone for a much needed rest and short vacation.

Tentative plans for the observance of Doctors Day, May 30, are developing. A dinner meeting honoring the living Country Doctors with an excellent speaker is being arranged. Ministers in the several Churches have responded marvelously to our request that the Country Doctor be used as the theme for the sermon on the last Sunday in May. Our newspapers will publish these sermons so that those unable to attend church may also have the benefit of these sermons. A group in each church will work with the Auxiliary in placing a wreath on each grave of a deceased physician. There may be many isolated graves. Already, one little known, has been located down by the River, unmarked.



### ARCHLOCK THE MIRACLE SHOE

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ORDERS  
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Recognized By Leading Doctors As The Greatest Posture And Arch Supporting Shoe As Yet Discovered. This Shoe Is Heartily Recommended By The Baynham Shoe Company. Every Pair Carefully Fitted By Experienced and Expert Fitters. X-Ray Fitting Used.

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**FRANKLIN**

Mrs. T. P. Leonard, President, entertained Wednesday, February 8, at her home when 12 members of the Franklin Auxiliary met for the regular monthly meeting. Plans were made for Doctor's Day observance with a Silver Tea on May 28, honoring the members of the County Medical Society. Mrs. Jack Marshall was appointed chairman of distribution of fruit juices, soups, etc., collected for needy tubercular patients.

Mrs. John G. South, of Frankfort, President-elect of the Kentucky Medical Auxiliary, who has been ill with pneumonia at the King's Daughters Hospital here, has returned to her home and is recovering nicely. The good wishes of all the Franklin County Auxiliary members have been with Mrs. South in her recent illness, and she has been greatly missed from the recent meetings.

Dr. and Mrs. L. L. Cull and little daughter, Alice Ann, are vacationing in Miami, Florida.

Dr. Vincent Barr, son of Dr. and Mrs. Joseph Barr, is stationed at Camp Shelby, Hattiesburg, Mississippi. Dr. Barr is a First Lieutenant in the Medical Corps. His mother, Mrs. Joseph Barr, spent a week with him recently.

Dr. and Mrs. L. T. Minnish are planning a vacation in Florida for early April.

Mrs. Reba Burrow Flynn left March 1st for a two-weeks visit with her daughter, Miss Margaret Sue Flynn, who is attending school in Miami Beach, and also with her sister, Mrs. Phil J. Gallagher, who resides there.

**GRAVES**

(Delayed, for the lack of space)

The Graves County Medical Auxiliary met at the home of Dr. and Mrs. N. M. Atkins on October 8, for the regular meeting. Nine members and one visitor were present. Following the Invocation, a vote of thanks was given Mrs. W. S. Hargrove, the retiring President.

Mrs. H. V. Usher installed the new officers for 1940-1941, and Mrs. N. M. Atkins, the new President, took the Chair and conducted the meeting.

A donation of \$2.50 was made to the Quarterly. A campaign to increase the circulation of Hygeia was announced emphasizing special effort to place this Health Magazine in the offices of all physicians, schools and beauty parlors.

The several Committee Chairman will serve as the Program Committee, each to be responsible for at least one guest speaker at the monthly meetings. The Auxiliary will meet at the homes of members in alphabetical order this coming year.

Delightful refreshments were served by the Hostess assisted by Mrs. Ella Atkins.

Mrs. John W. Orr, mother of Dr. Robert Orr of the Fuller-Gilliam Hospital is now enrolled as one of our new members.

Dr. Steele Robbins, now a Lieutenant in the Medical Corps, is at Fort Thomas for training.

**(Current News)**

The December meeting was held at the home of Mrs. Will J. Shelton, on Friday, December 13, Jane Todd Crawford Day, and the program included a memorial to her, our Pioneer Heroine. N. M. Atkins read a paper prepared by H. V. Usher on the Life of Jane Todd Crawford, a story we always enjoy hearing. This story and the tiny replica of her cabin home are available for use in the schools of the county.

Mrs. Atkins also gave a short talk on the problems of the Frontier Nursing Service, Inc., for which a Christmas box was prepared. A Christmas box was also prepared for Hazelwood Sanatorium.

The January meeting was held on our regular monthly meeting date, the third Tuesday of the month, January 21, at the home of Mrs. J. M. Mayer. Dr. N. M. Atkins was the guest

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speaker and gave us an instructive talk on the "Social Diseases" and outlined the work the County Health Department is doing to combat these diseases

The February meeting was held at the home of Mrs. Andrew Mayer and the guest speaker was Mr. C. J. Henry, Principal of Mayfield High School. His topic was "The Underprivileged Children." We have been much inspired by these able speakers at our Auxiliary meetings.

**HARDIN**

Our annual Jane Todd Crawford Day observance, December 13, was a gala occasion. Dolls were dressed, toys collected and a box of toilet articles was sent to Hazelwood Sanatorium for Christmas. Several articles were made for expectant mothers, also. Mrs. Lee Gross, our most elderly lady, was given a surprise for her 81st birthday when each Auxiliary Member presented her with a gift. Following a pot luck dinner, Mrs. George Bradley presented her with a large Birthday Cake.

Dr. Millard Bethel, working at the University of North Carolina for his Master's Degree in Public Health, received one of the two scholarships offered by U. N. C.

A County Health Unit has been established for Hardin County with Dr. C. H. Blanford, formerly of LaRue County, as Health Officer. Two nurses, a clerk and four sanitary inspectors have been appointed. Plans are being perfected in Elizabethtown for a new Health Center at a cost of \$35,000.00.

Dr. George Bradley, recently named a medi-

cal examiner for the selective service, and Mrs. Bradley, attended the wedding in Louisville of Miss Helen Edwards and Dr. Irvin Abell, Jr., December 28, 1940.

Dr. H. R. Nusz who suffered a broken hip, several broken ribs, cuts and bruises in a traffic accident about four miles from Elizabethtown, December 30, has been taken to St. Joseph's Hospital, Louisville, where the cast was removed and he is said to be improving rapidly.

Mrs. R. T. Routt of Sonora was given the Blue Ribbon for the most attractive entrance to her home during the Christmas holidays.

Dr. and Mrs. C. H. Blanford welcomed John Charles, their fourth child, into the family on January 21. The baby was born at St. Anthony's Hospital, Louisville.

Dr. and Mrs. Garnett Bale are the proud parents of Daryl Field, a daughter, born February 8, at the Baptist Hospital, Louisville.

Mrs. L. P. Herd and children of Danville, formerly of Elizabethtown, visited friends in Hardin County recently. Mrs. Herd is a Past President of the Hardin County Auxiliary.

Dr. C. H. Rogers of Rineyville, aged 76, one of the oldest physicians in the County, died at St. Anthony's Hospital, Louisville, January 29th.

Mrs. S. T. Carroll spent several days in Indianapolis visiting her sisters, recently.

Dr. William H. Barnard has bought the home of Dr. M. S. Allen. Dr. Barnard and family have occupied this home for several years. Dr. Barnard has been called to service at Camp in Georgia.

Master J. I. Taylor is recovering from an operation performed at a hospital in Louisville several weeks ago.

The Hardin County Medical Auxiliary gave a Stork Shower February 19, honoring Mrs. Louis Mirsky at the home of Mrs. R. T. Layman. About 25 guests were present, each individual bringing a gift. The Auxiliary presented Mrs. Mirsky with a beautiful bathinette. A baby girl arrived at Norton Infirmary, Louisville, March 3, to use these gifts.

A fire originating from a coal oil stove damaged the residence of Dr. H. R. Nusz at Cecilia.



Since Leitchfield is only about 30 miles from Elizabethtown, we have had plenty to talk about in our excitement over the Lashley Quadruplets.

Dr. L. E. Smith, secretary of the Kentucky Tuberculosis Association, spent a week in Hardin County showing films on tuberculosis to school children.

Mrs. Louise Hill is visiting her aunt, Mrs. R. T. Layman.

Dr. Harry Roby Walker has returned to New York after visiting his family at Glendale.

The February meeting of the Hardin County Auxiliary was held at the home of Mrs. Ham-matt. The Health Department presented a most interesting program.

#### JEFFERSON

The Sewing Unit of the Jefferson County Auxiliary has doubled its activities this year. Besides the regular monthly meeting this group has devoted another day each month to sewing for the Red Cross.

The January meeting was at the home of the chairman, Mrs. George Leachman, and the February meeting at Mrs. John Keaney's. All of the Red Cross sewing is done at the home of the president, Mrs. Bernard Asman.

Mrs. P. E. Blackerby, chairman of the Study Club, arranged the first meeting for February 3rd, at the Brown Hotel. Doctor Nora Dean delivered an address on "The Value of Women in Medicine." An informal discussion followed.

The quarterly luncheon took place at the Brown Hotel. Dr. Frank Stites, guest speaker, chose as his subject, "Smoke Abatement."

The Hospital and Welfare Committee has formed a reading group that visits and reads to the children in different hospitals. Mrs. Richard Hudson is chairman.

The call of the sunny South was answered by many Louisville people this winter. Among those who spent some time in Florida resorts were: Dr. and Mrs. P. E. Blackerby, Dr. and Mrs. James Lutz, Dr. and Mrs. Clayton McCarty and Mrs. Joseph Wier. Dr. and Mrs. Richard Hudson chose New Orleans for their winter holiday. Dr. and Mrs. Irvin Abell Jr., went to South America on their wedding trip.

A well deserved tribute was paid to Mrs. A. T. McCormack, January 10, on the "Bouquet to You" radio program when she was honored as one of the outstanding women of Louisville.

And, on the March 14 program, Mrs. Bernard Asman received a beautiful tribute. Flowers, generous bouquets of beautiful flowers, were sent to each on the afternoon preceding the Radiocast, by the Florist, Kingsley-Walker.

Mrs. J. W. Sams is still enjoying an extended vacation in Florida and Louisiana.

Dr. and Mrs. Wm. H. Emrich are proudly announcing the birth of a grandson, Paul Stanley Emrich, Jr. at the Merch Hospital, Oshkosh, Wisconsin, on March 26, the second child of Dr. and Mrs. Paul S. Emrich, formerly of Louisville.

#### MARSHALL

Marshall County is again on the air bringing to you sad reports and glad reports (but not bad reports) of our members.

Mrs. V. A. Stilley, promised to watch her steps more closely after a fall in her home about the first of December. She received a fracture of the right arm and is not yet able to use her hand.

This misfortune did not immunize our good president against the flu. About a week ago she together with Dr. Stilley was sent to her bed with influenza. Dr. Stilley is up and about again, while Mrs. Stilley is yet in her bed.

On January 30 we had our first meeting of the new year at the home of Mrs. Stilley. She

*for*  
**GOOD  
HEALTH:  
HONEY-  
KRUST**

*-the bread that's made  
with milk and honey*

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Frankfort — — — — — Kentucky

presided over the meeting in her splint and robe.

Dr. and Mrs. L. L. Washburn spent several weeks in Louisville, where the doctor underwent an eye operation. They have returned home, and the doctor is again busy in his work.

Dr. and Mrs. Herbert McClure have recently come to Marshall County to practice medicine at Calvert City. Mrs. McClure attended our January meeting, and is now a member of the auxiliary. Mrs. McClure is a graduate nurse.

Dr. and Mrs. Norval E. Green have transplanted their office and home to Benton.

Mrs. Donald Arant, one of our members and former public health nurse, recently left this county to continue in public health work in Fulton County.

An invitation from the Calloway County Auxiliary was extended to our Auxiliary to a dinner meeting on February 20 at Murray. Mrs. Herbert McClure and Mrs. N. E. Green attended the meeting and enjoyed especially Dr. Austin Bell's talk on "The Doctor's Wife."

Two subscriptions to Hygeia have been purchased recently, the magazine being placed in a county high school library. Subscriptions to another health journal have been given to two county high schools.

Leaflets on tuberculosis have been circulated, and Dr. N. E. Green has given a talk on tuberculosis to the members of the Calvert City Woman's Club.

Scrapbooks have been begun in the Auxiliary.

**MERCER**

The Mercer County Medical Auxiliary met, after postponements because of numerous illnesses and absences, on Friday, February 28th. Many members were disappointed that they could not attend the Style Show and Advertis-

ers Bazaar at the Brown Hotel, Louisville, for the benefit of the Quarterly, because of the conflict in dates with the State Meeting of the D. A. R., held in Harrodsburg, March 10-14, when hostess duties demanded that they remain at home.

**SAMSON COMMUNITY**

Mrs. J. W. York, of Cammer, and Members of the Samson Community Medical Auxiliary, met with a one o'clock luncheon February 4, 1941 at the Glasgow Country Club. There were eighteen members present. Mrs. C. C. Turner, President, presided over the business meeting which followed the luncheon. We voted to set aside a fund for the Club House and made a small contribution to the Glasgow Community Chest.

Mrs. Clifton Richards, president of the Woman's Club, entertained with a Colonial Tea on February 11, 1941. The receiving line consisted of the officers and all the past presidents of the club. The house was beautifully decorated in red, white and blue California flowers.

The many friends of Mrs. Ella Dixon, over the State of Kentucky, will be sorry to hear of her death on January 11, 1941. The funeral services were held at the Burkesville Christian Church, Burkesville, Kentucky, with burial in the Burkesville Cemetery.

Mrs. John Harlin is spending several days in Florida.

**PLAID**  
B R A N D  
**MACARONI or SPAGHETTI**

**PLAID**  
B R A N D  
**MACARONI or SPAGHETTI**

**PLAID**  
B R A N D  
**MACARONI or SPAGHETTI**





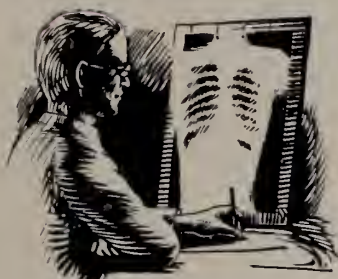
# Tuberculosis



E. D. C. \* AND APRIL! SPRING IS HERE!

Mrs. Lucius Ernest Smith, Louisville, State Chairman.

## TIME TO LIGHT THE CANDLE



### EARLY DIAGNOSIS WITH X-RAY

Since 1911 tuberculosis has taken the lives of 96,126 Kentuckians. Important advances have been made in the methods for controlling and treating this disease. Many hospital beds for the tuberculous have been provided, legislation has been enacted, literature has been distributed, far reaching educational programs have been developed and the public has been enlightened regarding the epidemiology of this great killer.

It is true that these efforts have borne fruit. The death rate has fallen from 227 per hundred thousand in 1911 to 68.2 in 1940, but the startling fact remains that tuberculosis is still the leading cause of death in the active period of life. This is the fact of vital importance to us today, and gives food for serious consideration as we face the great crisis of preparedness.

Physicians, health workers and welfare groups complain that they have no place to send their tuberculous cases when they find them. Our Sanatoria directors complain that they are loaded with far advanced cases, and have no room for the early cases that can be helped, or perhaps cured by hospitalization. They say that more than half their cases are moderately or far advanced, and so can only hope to have the disease arrested or their lives prolonged. The practicing physicians answer this challenge by complaining that patients do not come to them for help until they are ill from the disease, and many are hopelessly ill before symptoms appear. The epidemiologist complains that most cases have spread the disease germs to their families and contacts before the disease becomes evident to the victim. Taxpayers complain about the heavy tax burden forced upon them

and resent any plan that may increase their grievous burden, and more beds can not be provided without more money, and so the long line of complaints continues to be heard.

There is an old Chinese proverb that is applicable to our present situation, "It is better to light a candle than to curse the darkness." That is just what we are trying to do. There is a solution to this vexing problem within the reach of even the poorest communities of our State, and it can be put into operation without working a serious handicap on any group. It is true that we have been thinking of tuberculosis in terms of disease and have spent too much of our time and money caring for the wrecks made by it while complaining because of the grievous burden. Now we are turning our attention to the infected persons, for we know they are potentially tuberculous and come from the known far advanced cases in our midst.

For many years the National Tuberculosis Association has been alert to this vitally important phase of tuberculosis control. It has been urging that modern methods for finding tuberculosis early be routinely applied to all contacts, food handlers, teachers, expectant mothers, household help, students in athletics, and as many other groups as may be reached, in order that their infection may be discovered before serious damage has been done. They know that cases discovered by these modern methods can be cured, and many of them with only the care that can be given in the average home under competent medical supervision.

The month of April has been set aside for this Early Diagnosis Campaign, and the entire nation is thinking and talking about the same thing, at the same time. This does not mean April is the only time to talk and think about tuberculosis, but it does mean a time for concentrated efforts against our great enemy. Let us join in this program and see what we can do to make every one tuberculosis conscious. Let us see that all modern weapons are used to find these infected persons when they can be cured, and before they spread their germs to others. Remember "it is better to light a candle," can we count on you?

(More information about the Early Diagnosis Campaign may be had by writing your State Chairman, or the Kentucky Tuberculosis Association)

\* Early Diagnosis Campaign

## DOCTOR'S DAY, MAY 30, 1941

Mrs. John M. Blades, Butler

Oh, doctor of half a century ago,

We call you back to live again

Just for an hour or so

That we may realize your aim.

And, doctor of the present age,

Take heart from these dear souls of long ago.

Theirs was a harder stage

Of a game you both have loved.

Now, we pay tribute to those doctors of yore

And place these wreathes upon their graves,

But we drink a toast to you whom we adore

And cheer you on to deeds that well become  
the brave.

## THE DOCTORS SHOP

Mrs. R. T. Ballard, Harrodsburg, Chairman

The picture of Dr. William Harrison Gardner hung in the Doctors Shop was donated in September, 1940, through Mrs. C. C. Howard, Glasgow, State Historian. It was the property of Miss Lizzie Gardner of Woodsonville, Kentucky, the daughter of Dr. Gardner, who practiced in Munfordville and Hart County. Dr. Gardner was one of the first surgeons there to perform abdominal surgery. He specialized in the removal of stones from the bladder.

The inscription on the picture reads: Dr. William Harrison Gardner, Pioneer Doctor of Hart County, Kentucky. Born September 18, 1813. Died April 29, 1879.

## A PRAYER

*Lord of the Universe, accept me as one whose only pretense is that his life has been guided by the best lights his eyes could see. I can only ask to be judged by a high standard because I was blessed beyond most men in my parents and grandparents, and was inculcated through their example with a sense of right and wrong and a will to try to use these qualities as my guides. I have often failed to live up to these guides, but in all I have striven to do so. I have tried to be guided by the Golden Rule. More I cannot claim. On that effort and on that spirit I must submit myself for mercy.*

(Written by Dr. William Allen Pusey on April 28, 1926, and read at his funeral in Elizabethtown by the Rev. Henry H. Sweets, D. D., September 2, 1940)

## LETTER FROM BOMBED AREA

From Mrs. John Price to Sister of Mrs. Henry

Enos Tuley, Louisville

Millbrook Road, Elmsfield

Southampton, England

January 10, 1941

My darling Auntie Bud and Dos:

How very dear of you both to send me this draft. It is indeed, most thoughtful of you, and it will be most useful, as I am sure you can guess. The box too is most wonderful of you to think of, but, so far, we have heard nothing of it. I wrote straight off to Paxi, (Mrs. Hugh Reid Griffin, founder of first American Woman's Club in London) but they haven't had it, yet.

We thought of you at Christmas and toasted you at dinner. We were at Spital with my brother. Had a terrible time getting there. Only about 200 miles from Reading, (where we started from) and it took us twelve and a half hours to do it. No food on the trains and only tea and drinks at the stations, nothing to eat. We had taken some sandwiches, but, of course, did not intend them for a whole day's food. And so you may guess, we were pretty well famished by the time we landed. I wrote you a letter in November but posted by error before I had put the name on the back of the envelope. I hope you got it. Perhaps the Censor was kind as it was Christmas.

I think I had put you fairly up to date, but, of course, before the Blitz, as we call it here. We had had a pretty tough one the previous Saturday night with Mollotoffs and land mines, and all that sort of "Oh, be Joyfuls," as we call them. So John (husband of Writer) said "Let's get out for the week-end next week." So, we went down to Henley. We escaped the Blitz for those two nights but the home coming, I shall never forget. We came back by car with a friend, and it was the grimmest piece of travel, I have ever done. When we arrived at the top of the Avenue, we had to try road after road before we could get right home and, all through desolation. The whole world knows what Southampton looks like. So, it is no "hush, hush" to describe it. When we arrived here through complete wreckage all the way along, we were met by one of the handy men, who said all were alive in the flats. The ground looked like an overturned cemetery, with huge boulders of cement from other houses all over the place. We had 8 huge craters, one of them blocking completely one of the great garages. One hundred panes of glass broken. No water, heat, sanitation, food. NOTHING. But thank God, all our lives saved. Well, we stuck it out for three days, and one or two of the tenants, mostly men, stuck it out with us. We had no water to drink or to

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boil for tea, even if it had been safe boiled, which personally I doubt. So for three days, we used the beer and drinks, and drank beer, gin and whiskey and anything we could find. But, believe me, drink isn't two cents worth for food, or good, when you are aching for a cup of tea or coffee, much as it puts pep into you when you want it. No, Auntie Bud, I'd turn teetotaler any day now! Well, we got out on Wednesday afternoon, John, his manager and wife and I. We were in a car and took all the things we most loved with us, innumerable suit cases, just in case "Jerry" thought he might find anything more to bomb here, which I doubt. Do you know we drove 90 miles before we could find any one to take us in? No one would look at us. All full up. At last, after being out in the "Black out" for over two hours, we found a "pub" which sent us on to a Hotel tucked away in the trees opposite, where we found rooms; a good meal, the first thing to eat that day, a big fire to warm us, and the first good night's sleep—without sirens—for many a month. We thought we had really gone to heaven! The next day, John and the manager went back home and brought out 12 more of us (tenants). They had been sleeping four in a room. There were huge rooms. So, families were put together and we had a glorious week of rest. The men going back to Southampton, each day to mop up. We then went home near Birkenhead, for Christmas, and the manager came back here. We then came back for New Years to let him off again.

Now families are returning fast though we still get quite a few raids, as you will hear by radio. But, we are on the whole, glad to be back. It is our home—all we have is here—and I have tried to make it attractive; so maybe, when the war is over, you'll come along and pay us a visit. That would be grand!

I am so glad to hear about Frederick. I have a very soft spot for him in my heart, as you well know. That he is being a great and fine man, in the world, is the finest thing I could wish to hear.

I know nothing of your friends in Coventry; one does not get much news of personal interest from these towns, unless one meets some one who has come from, or corresponded there.

I shall go to see Paxi when the days become longer and warmer. She seems brighter than she was, (being over 80 years of age) and I think has been out to tea with some one near by recently. They have much to be thankful for. No raids, a nice attractive place to live in. Enough food and fires, and plenty of hot water. Think of the thousands who have none of these things!

I must close quickly, as John says if I hurry, he can get this into this Air Mail. So all my dearest love, and a heart full of thanks and gratitude for your thoughtful gift.

Bless you all, always.

Denise.

## COLD CAMPAIGN

Mary had a little cold, but wouldn't stay at home,

And everywhere that Mary went, the cold was sure to roam;

It wandered into Molly's eyes, and filled them full of tears,

It jumped from there to Bobby's nose, and thence to Jimmy's ears.

It painted Anna's throat bright red, and swelled poor Jennie's head.

Dora had a fever, and a cough put Jack to bed.

The moral of this little tale is very quickly said:

She could have saved a lot of pain with just one day in bed!

—From The Winnipeg, Canada, Rotary Club

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# JANE TODD CRAWFORD MEMORIAL

## *Jane Todd Crawford—Pioneer*

WINNING PLAYLET IN CONTEST

WRITTEN BY MISS ALICE CHRISTEN, 17, OF VALLEY HIGH SCHOOL, JEFFERSON COUNTY

Published, February 14, 1941, in *The Kentucky Gazette*, Shively, Kentucky

### WHAT HAS GONE BEFORE

Jane Todd Crawford was a brave pioneer woman. In December, 1809, she was extremely and dangerously ill. Dr. Ephraim McDowell traversed the sixty miles from Danville, Ky., to the Crawford's comfortable two-story log cabin to see her on December 13, 1809. After examining the sick woman he informed her husband that only a dangerous unprecedented operation could save her life. Sorrowfully the courageous woman took leave of her family and rode off on horse-back over the rough roads that led to Danville.

Dr. McDowell performed the first Ovariectomy on Christmas Day, 1809, and removed a large tumor from her abdomen. She had not even an anesthetic to alleviate the keen, terrible pain. Twenty-five days later she returned to her family.

### THE CHARACTERS

**Jane Todd Crawford**—The woman on whom the first Ovariectomy was performed.

**Thomas Crawford**—Her husband, the father of Alice, James, and Thomas Howell Crawford—Her children.

### THE SETTING

The curtain rises to show the interior of the Crawford's log cabin. The simple, sparsely furnished room contains a table, some chairs, a fireplace, and a few rugs made from the skins of animals. In the center of her family Jane Todd Crawford sits in a large chair. Happiness seems to glow about her as she speaks. Her face, worn with pain and care, has a look of ineffable sweetness and her brave spirit shows in her lustrous eyes.

### CURTAIN RISES

**Thomas Crawford:** (The Husband and Father). It is good to have you back again, Jane.

**Jane Todd Crawford:** (Speaking very gently): I am happy to be back, Tom.

**Alice Crawford** (Embracing her mother): Oh, Mother, we're so happy, too.

**Jane Todd Crawford:** I can never thank God enough for sparing me. I wasn't afraid to die,

but I hated to leave you all. You are so dear to me.

**Thomas Crawford:** And you are dear to us, Jane. Dr. McDowell is a fine doctor, isn't he?

**Jane Todd Crawford:** So he is—a fine doctor and a fine man. The prayer he prayed before he operated on me was so humble and sincere that I felt certain it would be answered.

**Alice Crawford:** It must have hurt terrible bad, Mother.

**Jane Todd Crawford:** It did, child, but I said the Psalms over and over. They seemed to give me courage, but the pain was almost more than I could bear.

**James Crawford:** Tell us about it, Mother.

**Thomas Howell Crawford:** Keep your mouth shut, Jim. Like as not she wants to forget it—if she can.

**Jane Todd Crawford:** That's all right, Thomas. I don't mind. I can't forget it, not yet anyway. It didn't take so long, at least that's what the doctor said. It seemed like years to me. The doctor told me it took almost a half an hour.

**Thomas Howell Crawford:** And you stood the pain all that time. Yer a brave woman, Mother.

**Jane Todd Crawford** (Smiling slightly): I had to, son. What else could I have done?

**James Crawford:** Go on, Mother. Tell us the rest.

**Jane Todd Crawford:** They laid me on Doctor McDowell's kitchen table, and covered me with blankets. There was a bowl of boiled water,

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### ANTIQUES BOUGHT AND SOLD

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some clean cloths, and Hannah, his old darky servant, who seemed more nervous and scared than me. After the doctor washed his hands he called in his nephew, Dr. James, to help him and the doctor said a prayer he had written, a prayer so beautiful seems I kin remember every word. Then the doctor made a cut on my left side about this long, (showing them with her hands about the length of nine inches).

**Alice Crawford** (Thinking of the pain her mother must have suffered): Oh, Mother!

**Jane Todd Crawford:** The doctor found a growth of flesh so big he had to take it out in two parts. The pain wuz awful bad, but I started saying the Psalms and they gave me strength. After the doctor finished and the cut was dressed they took me back to bed. In a few days I felt stronger and now I feel fine. Seeing you all again made me completely well.

**Thomas Crawford:** I think 'twould hurt none of us to say at least part of the doctor's prayer every day in thanksgiving for saving yo're brave Mother's life—and for Dr. McDowell, that his prayer for help from God will be heard when he operates on other people.

**James:** And, Father, wuzn't it fitten too that Dr. McDowell should do this on Christmas Day—we wuz all so anxious thinkin' of you, Mother, and praying for the big gift, that you would come back home healed. It seems too wonderful to be true.

**Alice Crawford:** Mother, you are so brave and good. I want to be like you if I can.  
(Curtain)

#### PLANTING ON THE JANE TODD CRAWFORD TRAIL

**Mrs. Irving Teare, Louisville**

We are planting flowers and a bit of shade  
Where a gallant woman rode unafraid,  
Trusting her Heavenly Father's care,  
Praying for strength her trial to bear.

May the faith and courage of this Pioneer  
Help us to cast out doubt and fear  
While Spring scatters blossoms along the way  
As symbols of hope for us today.

### PROCEEDINGS OF THE EIGHTEENTH ANNUAL MEETING OF THE WOMAN'S AUXILIARY to the KENTUCKY STATE MEDICAL ASSOCIATION Held At Lexington, Kentucky, September 16-19, 1940

(Continued from January issue)

#### ANNUAL REPORT OF EDITOR

The four issues of our Quarterly, the Kentucky Medical Journal—Part II—Woman's Auxiliary Section, have been published regularly, giving permanent record to the activities of the State organization and to all of the County activities reported. Too, reports and announcements of the National organization—Woman's Auxiliary to the American Medical Association and of the Woman's Auxiliary to the Southern Medical Association have been carried.

To all Publicity Chairmen and to all Officers and others who have so faithfully supplied the Editor, and Associate Editors, with these contributions, together with pictures, poems and interesting material for Auxiliary publication, we are deeply grateful. May we not hope for your continued cooperation and constantly strive to improve our publication?

One thing of note which I wish to call to your attention is the fact that we continue to publish our Quarterly by the support of our own efforts. A few donations from individuals and from County Auxiliaries and our Advertising contracts pay the full expense of our publication. Largely, the expense is paid through our advertisements. No funds are contributed by the State Medical Association nor by the State Medical Auxiliary. Be sure to study carefully the Auditor's Report of our Business Manager's accounts. This will be found in the October issue of the Quarterly.

Fortunately the State Medical Association continues to appropriate a Contingent Fund for our use, should the need arise. We are grateful for this as it gives us a comfortable sense

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of security. However, we take great pride in the fact that we have, thus far, been able to pay all of our bills, ourselves, without calling upon the State Medical Association for even a penny.

Let me remind you that this is really a remarkable achievement because both our Business Manager, Mrs. Wm. H. Emrich, and our Advertising Manager, Mrs. Joseph E. Wier, have been greatly handicapped, physically, this past year. Mrs. Emrich is now in the hospital for a serious surgical operation and Mrs. Wier is still wearing a brace for her broken back, a condition she has endured for more than a year. "Where there's a will, there's always a way." John Drinkwater expressed much of the need of the whole world today, where constructive thought and action—particularly action—is required, when he concludes his PRAYER with this earnest appeal: "—But Lord, the WILL—there lies our bitter need." May we always continue to have the WILL to support, and better develop, our publication.

Respectfully submitted,

(Mrs. Arthur T.) Jane Teare McCormack, Editor

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## ANNUAL REPORT OF BREATHITT COUNTY AUXILIARY

The Breathitt County Medical Auxiliary has held seven regular meetings and two called meetings during the fiscal year. The regular meetings are held during the months from September, when our new officers are elected, to May, our last program month. Our Auxiliary does not hold regular meetings during the summer months because the group is so small that it is impossible to get them together.

We have fifteen members in good standing. Twelve of these have been active for this year. Of this twelve at least a third is, or will become, inactive as a result of illness of themselves or families or because they will not be in town. Consequently, our meetings are small, our efforts concentrated in a few members.

Our meetings have followed rather closely the various seasonal drives against disease. We have presented programs and assisted with:

1. The Red Cross Drive—I mention this because the funds raised here were used largely in health projects which were necessary as a result of last year's flash flood.
2. The Tuberculosis Seal Sale—for which Mrs. Howard R. Parker was chairman. The Auxiliary was assigned the Business District of Jackson as their working field. In cooperation with the Health Department a total of \$120.02 was raised for Breathitt County.
3. The Breathitt County Medical Auxiliary presented a program on social diseases for February when National Social Hygiene Week was observed.
4. The Cancer Drive in April during which our President, Mrs. J. O. VanMeter, acted as Chairman. Through various news articles, public prayer in churches and other means we feel that the public in Jackson was made more conscious of cancer this year than ever before. The Medical Auxiliary is 100 per cent in membership of the Woman's Field Army for Control of Cancer. In addition letters were written and answers received concerning legislation for control of cancer clinics throughout the state. Both our Senator and Representative have expressed themselves as being in full cooperation with such a program.

In addition to these larger drives we have conducted a few projects locally:

1. Gifts of clothing and food to an entire family in Jackson at Christmastime.
2. A towel shower for Hazelwood Sanitorium as a tribute to Jane Todd Crawford. Eighteen bath towels were sent and we are sure they were well placed—from the very appreciative letter from Dr. Paul A. Turner.

The Auxiliary had planned a linen shower for our own local hospital which has reopened



recently, but due to illness those plans have not yet been carried out. We hope to make this one of our early projects for the coming year.

Aside from these activities we have had meetings on Jane Todd Crawford Day and a very interesting meeting in January at which a study was made of the development of Socialized Medicine.

In spite of the fact that our attendance at meetings has been small we were a paid up Auxiliary 100 per cent, to our State Treasurer, in our annual dues—an unexpressed tribute to the fact that though members cannot be active they do feel the desire to belong to such a valuable organization.

We are sorry to fall down on our reports to the Achievement Program Chairman but if such a program is carried out during the coming year we hope to get started with the other groups.

We earnestly hope that the coming year will bring improved health to our members and to those near them and that the Auxiliary may be able to function in a way that it will do a real service to Jackson and Breathitt County.

(Mrs. Frank K.) Carmie Bach Sewell, Secretary

#### ANNUAL REPORT OF CALLOWAY COUNTY AUXILIARY

Since there is a detailed report of our main project (Tuberculosis Program) in the October Quarterly, it will be necessary for me here to give but a brief summary of our year's work.

This has been a year of splendid cooperation from all officers and from each member of the Auxiliary. At our last meeting our officers were reelected with one exception. We are sorry our faithful secretary, Mrs. L. D. Hale, found it impossible to serve again. She was a great help to our group. It is my pleasure to welcome Mrs. A. D. Butterworth, our new secretary whose ideas and energy will contribute materially, to the constant progress of our Auxiliary.

Our duties with regard to the Achievements Project were carried out as outlined with regard to due celebration of Jane Todd Crawford and Doctors' Day. We have contributed two articles and several news items to the Quarterly. The state treasurer will report our dues paid, 100 per cent. We were glad to welcome one new mem-

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ber and will have another to greet at our next meeting. Eighteen health talks have been given in a little more than nine months.

Regarding our 1940 project which is to sponsor the formation of a Tuberculosis Association, ultimately ending in the eradication of T. B. from Calloway County. A heavy, enormous task, I know. It has been brought to my attention that Calloway County has the highest rate of T. B. in Kentucky, and that Hazel, Kentucky has a nation-wide record for this disease.

I want to mention the fine spirit and cooperation of our civic organizations. They are backing us 100 per cent. Our local papers want to publish anything they can to aid us in our drive. The Home Makers Clubs, sixteen in all, are giving us splendid help. It has been voted at their Advisory Council and reported to us by the Assistant State Home Agent, that the citizenship chairman in each club devote their time to a survey of cases in her community.

With all this help, beside what the public health physicians and nurses from State Health Department have promised, we should make definite strides this coming year in education and treatment, sharply curtailing and finally eliminating the number of T. B. cases in our county.

Respectfully submitted,  
(Mrs. Evan L.) Amelia Garrett, President

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#### ANNUAL REPORT OF CAMPBELL-KENTON AUXILIARY

The Woman's Auxiliary to the Campbell-Kenton Medical Society held eight meetings during the year. The December meeting was held at the home of Mrs. John E. Dawson in Ft. Thomas. Jellies and preserves were brought by the members and later taken to the Orphans Home for Campbell and Kenton Counties. Toys and books were also collected and sent to the Frontier Nursing Service, Inc., at Hyden, Kentucky.

Lectures, illustrated with slides, were given at the High School in Bellevue on the subjects, Tuberculosis and Venereal Diseases. The lecture on Venereal Disease Control, with slides, was also given to the Semper Fideles Class, by Mr. Voltan.

Members of the Auxiliary have been active in the Woman's Field Army for the Control of Cancer and 993 persons were reached with information on Cancer in 39 lectures given by our local physicians in the Medical Society. Each Auxiliary member contributed to the Woman's Field Army, our total proceeds being \$27.00 for this cause, including \$11.00 raised at a card party in the home of Mrs. Charles Baron, Covington.

Our Members assisted in the Hospital Drives for Booth Hospital, Covington and Speers Hospital, Dayton.

The last meeting of the year was held at the home of Mrs. John E. Dawson when the Members were entertained with a six o'clock dinner, followed by games and a social hour.

Respectfully submitted,

(Mrs. John E.) Lucile Dawson

#### ANNUAL REPORT OF FRANKLIN COUNTY AUXILIARY

Lists of new officers, advisory committee, committee chairmen and members sent promptly to the President and to the Quarterly.

Monthly reports sent to the President and to the Chairman of the Achievement Project.

Dues paid in full before March.

**THE QUARTERLY:** Twenty-one small news items and \$5.00 have been contributed, to the Quarterly during the year. Also, One Picture, Two Poems, One Story.

**JANE TODD CRAWFORD:** Jane Todd Crawford Day was fittingly observed. As December 13th was the day chosen by the State Medical Society for the Sixth District meeting, our Auxiliary combined a Tea for the wives of the visiting doctors with our Jane Todd Crawford observance. Among our guests was Mrs. Arthur McCormack who gave a beautiful talk on Jane Todd Crawford.

One large shipment of Van Houti Spirea and one package of flower seed have been contributed for the Jane Todd Crawford Trail.

A contribution of \$5.00 was given for the Memorial Fund of Kentucky.

42 books have been sent to the Jane Todd Crawford Library, in Greensburg.

**TUBERCULOSIS:** Our membership co-operated with the Parent-Teachers Organization in the sale of Christmas Seals and the distribution of literature.

**CANCER CONTROL:** Our Auxiliary assisted in the distribution of literature, offered speakers and contributed \$7.00 to this work.

**HYGEIA:** Three new subscriptions have been secured and a number of renewals promised.

**RED CROSS:** \$5.00 has been contributed and 210 garments completed by our Auxiliary for Franklin County's Red Cross quota for war refugees.

**BUNDLES FOR BRITAIN:** \$5.00 and several packages of clothing have been contributed by our group to this work.

**FRONTIER NURSING SERVICE:** Three large boxes containing clothing, baby layettes and toys have been sent to the Service.

**DOCTOR'S DAY:** Doctor's Day was fittingly observed. Mrs. M. C. Darnell gave a very interesting reading on two of our oldest doctors, their activities and accomplishments. The article was entitled, "Two Gentlemen of Kentucky." These doctors were, Dr. William C. Snead, practicing during the years 1812 to 1862, and Dr. Luke P. Blackburn, serving during the years 1816 to 1887. The material collected by Mrs. Darnell on Doctor Snead was later sent by re-



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quest to Dr. Horine for incorporation in his history of the early presidents of the Kentucky Medical Society, Dr. Snead having served in that capacity.

This very splendid sketch, "Two Gentlemen of Kentucky," was first prepared by Mrs. Darnell for our historical division and was sent to our State Chairman, Mrs. C. C. Howard of Glasgow. Mrs. Darnell also gave at our Doctor's Day observance an original poem entitled, "I Love Old Doctors." This poem was later published in the Quarterly.

**HEALTH LAWS AND CHILD WELFARE:** Health Laws and Child Welfare have been studied and several local physicians have spoken on these subjects at our meetings.

**PUBLIC RELATIONS:** Our Auxiliary arranged a large mass meeting which was held August 15th at the Christian Church in Frankfort. All civic, religious and patriotic organizations were represented. Speeches were delivered by our County and City Health Officers and by our City Physician. The speeches dealt with the Pre-Marital Examination Law and the Control of Venereal Diseases. After the speeches had been completed, a general forum was held by those present. Discussion of local problems such as garbage disposal, milk inspection and inspection of all establishments serving food in the community was held. Groups were appointed to go before the City Council to urge strict enforcement of all the ordinances and laws governing these projects.

**LEGISLATIVE:** Our Legislative Committee co-operated whenever requested by the State Medical Association to do so, in efforts to secure health legislation.

The Franklin County Auxiliary has undertaken as its local work the improvement of the hospital for Colored citizens, which was in a deplorable condition. The Franklin County Fiscal Court formerly contributed \$25.00 a month toward the support of this hospital. In recent years the appropriation had been cut to \$8.33 a

month. Our Auxiliary went in a body before the Court and made a plea that the \$25.00 a month appropriation be restored to the hospital. The Fiscal Court raised the monthly appropriation to \$16.66 and paid the difference between the former appropriation of \$8.33 and \$16.66 beginning with the fiscal year to the time when the \$16.66 allotment was to begin—a matter of four months, the amount of \$33.32, which has already been paid. It is the intention of our Auxiliary to go before the Fiscal Court again at some future date to ask for an additional increase. The Franklin County Auxiliary has contributed from its own funds \$150.00 to the Colored hospital.

A number of entertainments of various kinds have been given by our group as a means of raising funds. Others are planned for the early autumn. We close the years work with 25 paid memberships, no indebtedness and \$57.00 in our treasury.

Respectfully submitted,  
(Mrs. Joseph) Frederica Barr

### **ANNUAL REPORT OF GRAVES COUNTY AUXILIARY**

Graves County Auxiliary paid annual dues and sent to the State Treasurer early in the year; observed Jane Todd Crawford Day with an all-day meeting in the home of Dr. and Mrs. H. H. Hunt, bringing with us Christmas packages for the Kentucky Mountain children and sent for distribution through the Frontier Nursing Service at Hyden. At the same time we sent sheets, pillow cases and towels for the free bed patients at Hazelwood State Tuberculosis Sanitarium. Also, at this meeting, flower seed were donated for the Jane Todd Crawford Trail. After lunch, we listened to a very interesting and instructive lecture by Dr. Will J. Shelton on Tumors, such as afflicted Jane Todd Crawford.

We observed Doctor's Day on the designated day; assisted in the Cancer Drive; arranged for talks given to lay organizations on Cancer and Venereal Diseases, by our Public Relations Chairman. A large amount of literature on Cancer was widely distributed. We have assisted in the sale and purchase of Christmas Seals for the Tuberculosis Fund; sent \$2.50 for the support of the Quarterly; sent the Biographies of two physicians to our State Historian.

We realize that with only four meetings during the year, it is impossible to accomplish much on the Achievement Project. With this in mind, we voted, at our last meeting in August, to meet every month. Our newly elected President, Mrs. Morris Adkins, advanced this idea, and is planning to make the program for the year, centered around the Achievement Project, just as soon as

she learns what the Project will be. Mrs. Adkins seems to be wide awake, and greatly interested in the Auxiliary work, and we hope to have Graves County Auxiliary standing near the top another year, with a proud heart, feeling that we have done what we could to meet the expectation of our parent Organization and, as far as possible, meet the needs of our community for Health Programs.

Respectfully submitted,  
Mrs. W. S. Hargrove, President

### ANNUAL REPORT OF HARDIN COUNTY AUXILIARY

The year of 1939 started with a fair attendance and a good deal of enthusiasm and desire to be of service as an organization, especially to Tubercular patients. One of our projects is to help eradicate this terrible disease, which is one of youth's greatest enemies, from our State. We did worthwhile things under the guiding influence of our State President, Mrs. R. T. Layman, of whom we are very proud. She has given of herself sacrificially, unselfishly, and nobly in spite of the sorrow which came to her in March in the passing of her husband.

At our first meeting, Mrs. Layman and Mrs. George Bradley gave us a splendid report of the State Meeting held last September at Bowling Green. We were very proud of having been awarded the Blue Ribbon for the most points in the Achievement Project Contest. Regular meetings were held each month.

Our second meeting was held at the home of Mrs. Wm. Barnard. Current events in the Medical World were read by Miss Eliza Lancaster. Our December meeting was held at the home of Mrs. Wm. Bethel, our Jane Todd Crawford Chairman. The day was spent in sewing. Pajamas, sheets, and pillow slips were made for indigent tubercular patients of Hardin County and free bed patients at Hazelwood Sanatorium. We also sent each of these patients a box for Christmas. We visit our tubercular patients, some of the most needy ones quite often, and learn of their needs.

At present we are caring for a young man who has been ill for several months with tuberculosis; and who, with his wife and baby, lives in a trailer. We buy their food and medicine and anything they need. At present we are trying

to find work for the wife and get the baby away from the father. We are also getting some help from one of the churches for this destitute little family.

We work hard on the Christmas Seal Sale, and also hold Rummage Sales often to have money to carry on our work. We have the sympathy and appreciation of the public for the work we are doing.

Mrs. R. T. Layman, assisted by Mrs. George Bradley, gave a program in October, 1939, to the P. T. A. The subject, "Youth and Health," was demonstrated by a house made of candy and vegetables.

Health Education is our outstanding project. Our Cancer Control Chairman ran articles in our city papers for several weeks, copies received from the National Headquarters. We also sent money to our State Chairman.

Our February program was held at the home of Mrs. George W. Woodard. The program was on Birth Control and was presented with a lecture and slides by Mrs. Charles G. Tachau of Louisville.

Doctor's Day was observed, honoring Dr. George Hartt, and all physicians who have lived in Kentucky. We gave \$5.00 to one P. T. A. lunch fund to help feed underprivileged school children. We also contributed \$10.00 to the support of the Quarterly. News items are sent regularly to the Quarterly, more than twenty each year.

Mrs. R. T. Layman, Health Chairman of the Women's Club, was the chairman of the February program, and introduced Dr. John R. Pate of Louisville, who gave a talk and presented slides on Venereal Disease and Premarital Examinations.

We were active in sanitation measures. A committee inspected the school toilets.

We will exhibit scrap book and posters at the State Meeting, also History of County Auxiliary.

Our State President attended the National Convention of the American Medical Auxiliary, New York. She, and her State-Corresponding Secretary, attended the Mid-year Board Meeting in Louisville. Four of our members attended the Advertisers Bazaar and Style Show, and luncheon at the Brown Hotel, which was sponsored by Jefferson County Auxiliary. Our State President also attended.

Respectfully submitted,  
(Mrs. Leslie P.) Marian Herd, President

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**JEFFERSON COUNTY MEDICAL SOCIETY**



**ANNUAL REPORT OF  
JEFFERSON COUNTY AUXILIARY  
Achievements For Year 1939-1940**

1. Dressed dolls for the mountains.
2. Managed booths for the Tuberculosis Seal Sale.
3. Christmas party at Children's and City Hospital.
4. Membership drive. Now have 122 members.
5. Active part in Cancer Drive.  
(The Auxiliary received the award of merit for joining 100 per cent).
6. Tea given for Woman's Field Army.
7. Advertisers Bazaar and Style Show.
8. Crippled Children's Easter Seal Sale, \$5.00.
9. Bought Girl Scout cookies during their drive and sent them to the City Hospital.
10. Delivered cookies to the Children's Free and Red Cross Hospitals.
11. Had representatives at Mayor's Tea.
12. Had representatives at Tea and to attend Premiere to meet Miss Irene Dunn.
13. Inspected W. P. A. Project at State Board of Health.
14. Luncheon for those planning to read at the Children's Free Hospital.
15. Board meetings as required. (1 called meeting.)
16. Held 13 Meetings of the Sewing Group, 794 articles completed.
17. Quarterly luncheon meetings as required.
18. The study group sponsored a movie showing the Boston Breast Milk Dispensary, the one after which our own is modeled.
19. The Study Group made the following tours:
  - a. To the Children's Center (new and improved Detention Home.)
  - b. Clarksdale (one of our new low-cost housing units.)
  - c. To three gardens that were open to visitors.

Respectfully submitted,  
(Mrs. Richard T.)      Julialee K. Hudson

**ANNUAL REPORT OF  
MADISON COUNTY AUXILIARY**

Regular meetings have been held in September, December, February and May. Board meetings have been held subject to the call of the President. The regular meetings included attendance at one luncheon, two teas and one joint dinner with the Madison County Medical Society.

Our aims for the year have been: the promotion of friendship among the families of physicians in Madison County; assistance in the Tu-

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erculosis and in the Cancer Control Programs. Chairmen were appointed and Committees have been active.

A replica of the Jane Todd Crawford Cabin was put on exhibition during the summer and following that period, it was sent around to the various schools in the county.

Copies of Hygeia were donated to the Junior High School Reading Room of Berea College. Other libraries in the county were already supplied with this magazine.

Respectfully submitted,  
(Mrs. Wilson F.)      Mary A. Dodd, President

**ANNUAL REPORT OF  
MARSHALL COUNTY AUXILIARY**

The Auxiliary for the Marshall County Medical Society held eight meetings since September 1939. We regret to report the loss of two members during the past year, due to transference of locations, decreasing our membership to nine. Five members are active, having paid their annual dues.

One of our outstanding meetings of the year was held in October when we gathered with the doctors at the T. V. A. Cafeteria in Gilbertsville for dinner, and then in the T. V. A. Hospital where the Auxiliary entertained the doctors with an interesting program.

At the December meeting the Auxiliary members were happy to have as guests, Mr. and Mrs. Alfred Rawlingson of Benton. Mr. Rawlingson, T. V. A. Camp Librarian for the Kentucky Dam, gave us a delightful review of Dr. Bertrand M. Bernheim's book "Medicine at the Crossroads."

Due to unavoidable conditions, a meeting was not held in March, thus our April meeting was given over to the electing of officers.

Mrs. Harriett Arant, a public health nurse of Marshall County, gave a very instructive talk to the Woman's Club of Benton. The Auxiliary has also been instrumental in getting the Woman's Club to devote several of their meetings to the promotion of health.

Our scrapbook has been kept up to date.

The Auxiliary has contributed the small amount of \$5.00 to our fine publication, the Quarterly.

Mention should be made of a contribution to the Auxiliary by Dr. A. J. Bean, one of our best county doctors. The mortar, pestles and lancet given the Auxiliary belonged to Dr. Bean's grandfather, a pioneer physician of Marshall County. Dr. Bean requested that these be put in the McDowell Apothecary Shop at Danville.

We regret that we have been so inactive during this past year. Each member resolves that a greater work will be done during this next year than has been accomplished during the past. A program has been outlined for our activities this coming year.

Respectfully submitted,

(Mrs. Norval E.) Fern Green, Secretary

### ANNUAL REPORT OF SAMSON COMMUNITY HOSPITAL AUXILIARY

The Medical Auxiliary to T. J. Samson Community Hospital has twenty-two members with a complete staff of officers and committee chairmen.

We have held nine meetings during the year, at each meeting we had health talks or discussion of subjects found in Hygeia. Also we provided speakers for lay organizations.

For the Woman's Field Army for Cancer Control, we secured a speaker and contributed Five Dollars.

Jane Todd Crawford Day was observed with a luncheon, at which time our chairman presented the little replica of the Cabin which was placed in our public library.

At Christmas, we sent to Hazelwood Sanatorium pajamas for the indigent patients and assisted in the sale of Christmas Seals. This sale amounted to Two Hundred and Twenty Dollars.

We have no increase in Hygeia subscriptions over last year; have only fifteen, one a gift subscription to our Public Library and two others

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go to the High School.

Doctor's Day was observed by listening with friends of other organizations to the radio program given by our State Radio Chairman.

A few histories of pioneer doctors have been secured.

At the suggestion from our State Public Relations Chairman, we held a Public Relations Tea. At this time one of our local doctors answered questions on health subjects which had been sent in from different clubs.

For the Quarterly we have contributed Five Dollars, one original poem, and several news items. Also, copying our State Meeting in Bowling Green, we held a "Quarterly Quiz" which created much interest.

Locally, we cooperated with our Daily News Paper in a campaign for "Cleaner Streets in our Town." Also with the County Health Unit, working in rural schools by giving prizes for the best essays on health subjects. Also through this unit we provided linens and reading material for the needy. For Crippled Children's Clinic we gave Five Dollars.

Respectfully submitted,

(Mrs. C. C.) Florence Turner, President

(Proceedings Concluded)

My grand-dad views the world's worn cogs,  
And says, "We're going to the dogs."  
His grand-sire in his house of logs,  
Swore things were going to the dogs!  
His grand-father in the Irish bogs,  
Said things were going to the dogs.  
The cave man in his queer skin togs,  
Said, "Things are going to the dogs."  
But this one thing I wish to state—  
The dogs have had an awful wait.

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"I have been a learner all my life, and I am a learner still; but I do wish to learn upon just principles. I have some ideas that may not be thought to furnish good materials for a liberal—. I do not like changes for their own sake, I only like a change when it is needful to alter something bad into something good, or something which is good to something better. I have a great reverence for antiquity. I rejoice in the great deeds of our fathers in England and in Scotland. It may be said, however, that this does not go very far towards making a man a liberal.—But the basis of my liberalism is this. It is the lesson which I have been learning ever since I was young. I am a lover of liberty and that liberty which I value for myself, I value for every human being in proportion to his means and opportunities. That is a basis on which I find it perfectly practicable to work in conjunction with a dislike to unreasoned change and a profound reverence for everything ancient, provided that reverence is deserved. There are those who have been so happy that they have been born with a creed that they can usefully maintain to the last. For my own part, as I have been a learner all my life, a learner I must continue to be."

—William Ewart Gladstone.

From the murmur and subtlety of suspicion  
with which we vex one another,

Give us rest.

Make a new beginning,

And mingle again the kindred of the nations  
in the alchemy of love,

And with some finer essence of forbearance  
Temper our minds.

Aristophanes—444-380 B. C.

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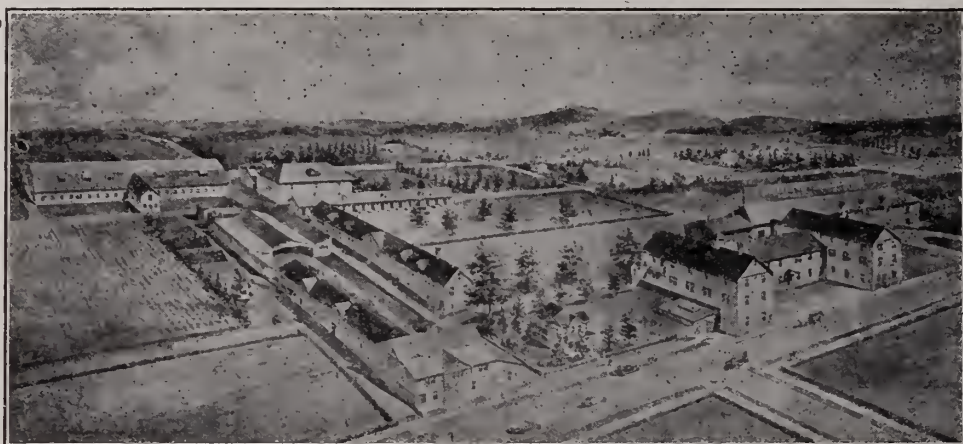
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KENTUCKY MEDICAL JOURNAL—PART II  
WOMAN'S AUXILIARY SECTION

THE N.Y. ACADEMY  
OF MEDICINE  
JUL 2 1941

Thistles  
and  
Tuberculosis

Every Thistle Comes from  
Another Thistle

\*\*\*\*\*

Every Case of Tuberculosis  
Comes from  
Another Case of Tuberculosis

\*\*\*\*\*

ERADICATE KENTUCKY OF BOTH

**PRELIMINARY PROGRAM  
NINETEENTH ANNUAL MEETING OF THE  
WOMAN'S AUXILIARY**

**to the  
KENTUCKY STATE MEDICAL  
ASSOCIATION**

**LOUISVILLE, KENTUCKY**

**Monday, September 29, 1941**

**9:00 A. M.-4:00 P. M.**

Registration Daily

(Every woman is requested to register immediately upon her arrival.)

Mrs. Frank Sewell, Jackson, Chairman  
**12 M.**

**Roof Garden, Brown Hotel**

Quarterly Luncheon (Subscription)

Pan American Program

Mrs. A. T. McCormack, Louisville, Presiding  
**2:00 P. M.**

**Derby Room, Brown Hotel**

Study Class—Our New Hand Book, Revision  
Suggestions and Discussions of plans for coming year.

Miss Grace Stroud, Louisville, Chairman  
**3:45 P. M.**

**Derby Room, Brown Hotel**

Pre-Convention Board Meeting

Mrs. John M. Blades, President, Presiding  
(All county presidents, state officers, and chairmen are urged to be present. All members are invited.)

**8:00 P. M.**

President's Report to House of Delegates

Mrs. John M. Blades, Butler

**Tuesday, September 30**

**9:00 A. M.**

**General Meeting, Open Session**

Joint meeting with the Kentucky State Medical Association, Installation of President of the Kentucky State Medical Association.

**9:15 A. M.**

**General Meeting, First Session**

**Roof Garden, Brown Hotel**

Presiding Officer, Mrs. J. M. Blades, President  
Invocation

Music

Address of Welcome Mrs. Bernard Asman,  
Louisville

Response Mrs. Evan T. Garrett, Murray

Roll Call and Parade of Counties

Minutes of the Eighteenth Annual Meeting

Report of the President Mrs. John M. Blades

Reports of Committees:

Arrangements, Mrs. Bernard Asman

Registration; Credentials, Mrs. Frank Sewell

Messages from Kentucky State Medical Association:

W. E. Gary, M. D., Hopkinsville

E. L. Henderson, M. D., Louisville

Messages from Advisory Council:

Virgil Kinnaird, M. D., Lancaster

Van A. Stilley, M. D., Benton

A. T. McCormack, M. D., Louisville

**12:30 P. M.**

**Blue Grass Room, Brown Hotel**

Subscription Luncheon Honoring Past Presidents of Auxiliary to the Kentucky State Medical Association

Presiding Officer Mrs. John M. Blades,

Invocation Mrs. Donald P. DeHart, Butler

Greeting by each Past President

Entertainment

**8:00 P. M.**

Public Meeting Kentucky State Medical Association

**Wednesday, -October-1**

**9:30 A. M.**

**General Meeting**

Presiding Officer Mrs. John M. Blades,  
Reports:

Officers

Chairman of Committees

County Presidents

Award of Blue Ribbon to Counties Winning Achievement Project, Mrs. John M. Blades.

Reports:

Delegate, Woman's Auxiliary to the American Medical Association

Councilor, Woman's Auxiliary to the Southern Medical Association

Unfinished Business

New Business:

Report of Committee on Resolutions

Report of Committee on Credentials and Registration

Report of Nominating Committee

Election of Officers

Installation of Officers

Address of the President Mrs. John G. South,  
Frankfort

**12:30 P. M.**

Annual Luncheon, Subscription

Toastmistress .....Mrs. John M. Blades

Invocation .....Mrs. Luther Bach

Honoring our National and Southern Presidents

Mrs. R. E. Mosiman, Seattle, Washington,

President, American Medical Auxiliary

Mrs. M. Pinson Neal, Columbia, Missouri,

President Southern Auxiliary

Special Guests representing Kentucky Medical Association

W. E. Gary, M. D., Hopkinsville

E. L. Henderson, M. D., Louisville

Advisory Council:

Virgil Kinnaird, M. D.

V. A. Stilley, M. D.

A. T. McCormack, M. D.

**3:45 P. M.**

**Derby Room, Brown Hotel**

Post Convention Board Meeting

Presiding Officer, Mrs. J. G. South, Frankfort

All Members Invited



# KENTUCKY MEDICAL JOURNAL PART II

## WOMAN'S AUXILIARY SECTION

Published Quarterly Under the Supervision of the Advisory Council

Vol. X, No. 3

Bowling Green, Kentucky

July, 1941

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Doctors' wives should know what is going on.  
A wife is not a first-class doctor's wife unless she knows about his work and the progress being made in medicine.

Morris Fishbein, M. D.

### PRESIDENT'S MESSAGE

Mrs. John M. Blades, Butler

Happily, the Auxiliary Year rolls along into the last quarter! You have worked so beautifully and I am so anxious to report all the fine things that you are accomplishing that I can hardly wait until Convention time in Louisville to reveal my enthusiastic appreciation. To enumerate all of your achievements would consume the remainder of the Quarterly so, now, I shall merely say "Thank you" for coming to the Board Meeting at Florence and "Thank you" for the reports which you sent. Each Auxiliary organization has made some outstanding contribution to Auxiliary Work during the year and each chairman has done her work well.

We extend a cordial welcome to the members of our new Auxiliary in Daviess County. It is gratifying to know that the physicians of that county were really desirous of having an Auxiliary organized. We appreciate this greatly and send our best wishes for the success of the Auxiliary.

We welcome all new members and very proudly add the name of Kentucky's First Lady, Mrs. Keen Johnson, to our list.

We regret that we must submit to some unfortunate losses in our ranks. The Auxiliary is grieved to lose such a kind and sympathetic friend as Dr. Austin Bell. We are also made sad by the necessity of yielding to another State, because of her husband's call to aid National Defense, one of our busiest and most enthusiastic members, Mrs. Evan T. Garrett. We may well return Mrs. Garrett's tribute to our friendship when she said, "These meetings, our individual contacts with other doctors' wives, contribute something fine, intangible perhaps, but real and permanent to our lives. The inspiration on these occasions has sunk deeply into my soul. As I leave Kentucky to become a part of the Auxiliary of another State let me repeat this thought with the poet:

"Beauty seems sometimes to pass away

Yet 'tis sunk in the depths of the soul  
Violins quiver with music's charm

In a moment their notes waft away  
Yet to the vibrating soul in tune

Comes a melody ever to stay.

Beauty seems sometimes to pass away

Yet 'tis sunk in the depths of a soul,"

(Continued on page 73)

## -:- EDITORIALS -:-

**SUMMER PROGRAM MAKING**

Now, is the favored time for making the programs for the next year's work. Regular meetings are over in most of the Women's Organizations. Vacation is here. Leisurely summer days are really more satisfactory when some purposeful, constructive task fills a part of the vacation hours, thus bringing a sense of achievement.

A program well planned in advance prevents many mishaps, including crowded or vacant periods. It brings satisfaction for the Chairman and all those taking active part, as well as for the audience. September and October, when the organized groups swing into full stride, appear unbelievably soon after the Fourth of July is celebrated. And, all over the land, alert Madam President is making her plans as, thoughtfully sharpening her pencil, she stimulates and encourages progressive Committees to budget their program time.

**KENTUCKY RECOGNIZED AT A. M. A.**

Kentucky received recognition, again, at the Annual Meeting of the American Medical Association and Woman's Auxiliary. This Convention was held June 2-6, in Cleveland. Dr. Fred W. Rankin, Lexington, was elected President-Elect of the Association and Mrs. Samuel H. Flowers, Middlesboro, was elected Recording Secretary of the Woman's Auxiliary. The next Annual Meeting will be held at Atlantic City in May, 1942.

**THE ANNUAL MEETING**

The Annual Meeting of the Woman's Auxiliary to the Kentucky State Medical Association will be held in conjunction with the Annual Meeting of the Kentucky State Medical Association at the Brown Hotel, Louisville, September 29, 30, October 1, 2, 1941. Mrs. John G. South, Frankfort, President-Elect, is Chairman of the Program and Mrs. Bernard Asman, President of the Jefferson County Auxiliary, is Local Chairman for Auxiliary Arrangements and Entertainment.

Reservations should be made early with the Brown Hotel if you wish to stay at the Headquarters Hotel.

**HOBBY COLUMN**

Have you a Hobby?

Or, would you like to have a Hobby?

If so write Mrs. John B. Floyd, Richmond. She is interested.

And perhaps we may have a Hobby Nook in our Quarterly.

**SAVE SEEDS**

Please save seeds from your garden flowers for the Jane Todd Crawford Trail and bring to the Annual Meeting in Louisville. Also, bring iris bulbs, climbing roses, or what-have-you, and we will get them planted on the trail.

**A. M. A. IN CLEVELAND**

The Nineteenth Annual Session of the Woman's Auxiliary to the American Medical Association was held in Cleveland, June 2-6, 1941 with a good attendance from the 37 Organized States and the District of Columbia. Paid Membership now totals 27,179, with Ohio, organized in September 1940, presenting 1679 of this number. If Ohio can enroll 1679 in a few months, why cannot Kentucky, organized in 1923, increase its membership so that it may join the Thousand Class with California, Illinois, (1123), Missouri, New York, Ohio (1679), Pennsylvania and Texas?

The President, Mrs. V. E. Holcombe, Charleston, West Virginia, whom we all recall as a member guest during the recent Louisville meeting of the Southern Medical Auxiliary and who was our guest at the Richmond 1937 meeting, presided with gracious effectiveness.

Reports show increased activity among Auxiliary Members in all States, with more study of medical and legislative problems—social and economic—and with greater participation in civic and charitable programs.

"Nutrition—Food For Fitness" was the title of a timely address by Dr. Helen A. Hunscher, and, "What Is Sound Health Education," another, by Miss Etta A. Creech. These are to be published in the next issue of the Bulletin of the Woman's Auxiliary to the American Medical Association. One Dollar sent to the Circulation Manager will bring you these valuable addresses and the succeeding three issues of the Bulletin, as well.

The Bulletin has made remarkable progress and now has a paid circulation of almost 2000, which is an accomplishment for the first year. Mrs. George H. Ewell, Chairman of Press and Publicity, will continue as Editor, Mrs. H. E. Christenberry, first Circulation Manager was elected Second Vice-President.

Mrs. R. E. Mosiman, Seattle, was installed as President for the year 1941-1942. Mrs. Frank Haggard, San Antonio, a former President of the Southern Medical Auxiliary and our guest at the Richmond Meeting, was elected President-Elect. Mrs. Samuel H. Flowers, Middlesboro, Kentucky, was elected Recording Secretary.



Of outstanding interest in the sight-seeing trips was the visit to the Cleveland Health Museum where life-sized models permit an easy and quick method of learning anatomy and physiology. A remarkable "Heart Chart" displayed models of different creatures and listed the normal heart beat per minute. Among these, the canary was shown with a rate of 1000 per minute; man, cow, pig and goat were listed with a rate of 70 per minute; an elephant, 26 heart beats per minute!

Loans from other museums were on display, including one from the Mayo Foundation on "The Dangerous Appendix," another from A. M. A. on "Personal and Public Health." One afternoon is not enough to allow for a complete view of this excellent provision for visual education recently opened free to the public.

At the Allen Memorial Library, following a delightful and artistic musical program, interspersed with charming descriptions of Cleveland, a reception was held honoring the President, Mrs. Holcombe, and the President-Elect, Mrs. R. E. Mosiman. This Library is a magnificent memorial and must be of great benefit to any physician wishing to use reference material for there is rare wealth of material here. Several quiet small rooms are provided for study where a physician may collect his books and materials and have the exclusive use of his room for as long as four weeks while preparing a paper or report.

On the upper floor, medical relics are collected and a fine museum of over 4000 catalogued objects on view.

Emphasized for future programs in Auxiliary activity was Defense Work, particularly Nutrition as practiced in the homes for our own families; also, assistance in placement, or home finding and recreation for the wives and families of physicians who wish to be near the physician temporarily in Army Camp. Red Cross Work and Bundles For Britain received encouragement, as vacation activities.

### PRESIDENT'S MESSAGE

(Continued from page 71)

The Auxiliary of Ohio will profit by our loss, but we shall be waiting to welcome Mrs. Garrett again to our State when rumors of war shall pass away.

May I meet each and every one of you in Louisville at our State Convention? And may we there pledge our loyalty and devotion to Mrs. Christine Bradley South, who, with the co-operation of Mrs. Bernard Asman, General Chairman of the Convention, will have a splendid program prepared for our entertainment? See you in Louisville!

Pan-American interest was stressed with suggestions that we all study Spanish and try to develop personal contact with some of the countries of Central and South America.

The growing appreciation of the work of the Auxiliary was evidenced as never before and the future holds bright promise for further advancement.

### THE GREATEST WORD— TOGETHER

Christopher Ruess

Appreciation is expressed to The Roman Forum, Los Angeles, for the privilege of reprinting the following explanation and poem found in the May, 1941 issue:

(This rhapsody may be acceptable in these days of achieving national unity. Read Paul's rhapsody, 1 Cor., 12. Of course, the reference below is to the red and white blood corpuscles and in the fifteenth line to the generally held theory about cancer.—C. R.)

City of unselfish trillions—

Myriads of perfect cooperators—

Where each citizen knows his task and performs it;

Where the red soldiers feed all;

Where the white soldiers protect all;

Where all citizens work and build together—

Each playing his part as in a great symphony!

Where none is envious or jealous of another;

Where each one is honorable and each one significant;

Where he that is greatest

Is he that is servant of all;

Where when one suffers all suffer together!

City dedicated to new life and coming generations;

City of infinite possibilities!

Here when one member turns selfish,

And would grow great at the expense of others,

All members are in jeopardy for joy and life—

City where the common good of all is indeed the good of each.

City of millions and trillions—and yet not crowded or congested;

Every citizen is wanted; every citizen is useful;

Not one is superfluous.

City of living cells,

Each of which is born, and lives, and multiplies, and dies,

And yet the whole city lives on and on:

**Miraculous city of the human body!**

Would that men would learn to live together

In rhythmic health and joy and peace

As your trillions, inwardly singing, work and serve and live together.

### DR. W. M. RUSH AND DR. KELLER MACK ON THE RADIO

The Woman's Auxiliary of the Kentucky State Medical Society is indebted to Drs. Rush and Mack for two good programs. These interesting programs were given by two Jefferson County physicians.

On April 26th, over station WHAS, Dr. Mack was interviewed by Mrs. Joseph E. Wier, State Radio Chairman, on some of the achievements in Child Health. Dr. Mack's splendid speaking voice and sure handling of his subject made an outstanding program.

On May 29th, over station WAVE, Dr. Rush of Fern Creek was interviewed by Burt Blackwell, announcer at the studio. The purpose of this program was to show the service and value of the Country Doctor to his community. At the end of the program, Mr. Blackwell remarked to Dr. Rush, "I can't believe you have never spoken on the radio before, Dr. Rush. You are a natural." Dr. Rush did have some qualifications which made him especially suited to give his experiences as a Country Doctor. He writes a weekly column for his community paper and signs it "The Country Doctor." Dr. Rush has practiced for thirty years in the community in which he was born. He started practicing in the Horse and Buggy Days.

### OUR BUSINESS

**Mrs. Wm. H. Emrich**

We could not expect you to think of everything while you were busy with Spring house-cleaning, gardening and planning your Summer vacation. However, we do hope you have remembered our Advertisers, who have so many things which are used in our daily life. For example, the merchandise and service display featured at the Style Show and Advertisers' Exhibit on March 11th; these and the Advertisements in the Quarterly should be helpful as shopping guides.

The Receipts, Saleslips, Labels, Wrappers, Bottle and Jar caps which you have from these purchases may help you to win a prize in the Advertisers' Contest. Send them to your County President before September 1st. and she will send a report of the results to Mrs. Wm. H. Emrich, 842 S. Second, Louisville. Prizes donated by our Advertisers will be awarded the winners at the Kentucky State Auxiliary Meeting September 29. For details of Rules of Contest refer to page 45, April Quarterly.

Deliberate slowly, but execute promptly the things which have appeared unto thee proper to be done.—Lincoln.

### MINUTES OF THE SPRING BOARD MEETING WOMAN'S AUXILIARY TO THE KENTUCKY STATE MEDICAL ASSOCIATION

**April 25, 1941**

The Spring Board Meeting of the Woman's Auxiliary to the Kentucky State Medical Association was held in Lloyd Memorial Home, Florence, after a luncheon, Friday, April twenty-fifth. Mrs. John M. Blades, Butler, presided.

Mrs. Robert Carter, Florence, offered the Invocation.

Ten Board members and eight visitors from the Licking Valley Auxiliary were present.

The following reports were given:

Committee Chairman and Officers:

First Vice President (Organization Chairman)—Mrs. John B. Floyd. Mrs. Floyd reported her efforts toward new organizations through letters and personal contacts. She has secured information which will be of value for the future. Mrs. Keen Johnson joined the Madison County Auxiliary in March.

Parliamentarian—Mrs. S. C. McCoy.

Mrs. McCoy reported having been present at each of the three Board meetings.

Cancer Control—Mrs. Bernard Asman.

Hygeia—Mrs. J. W. Sams.

Jane Todd Crawford Memorial—Mrs. A. T. McCormack.

The ladies at Greensburg continue to receive iris, seeds and bulbs and will be grateful to receive them at any time.

Attention was called to the Essay and Playlet Contests in schools where models of the JTC Cabins were distributed.

Radio—Mrs. Joseph E. Wier.

Mrs. Wier reported one radio program to commemorate Jane Todd Crawford, one forum on "How Women Can Best Prepare Themselves for a Part in These Trying Times," and a Doctor's Day program honoring "The Country Doctor."

#### **The Quarterly:**

Editor—Mrs. A. T. McCormack.

Mrs. McCormack reviewed the contents of the October, January and April issues of The Quarterly.

Business Manager—Mrs. Wm. H. Emrich.

Mrs. Emrich reported the total balance to date (April 5, 1941) to be \$445.92.

Advertising Manager—Mrs. Joseph E. Wier.

Mrs. Wier reported almost enough advertising contracts to pay for The Quarterly when added to the amounts received from the style show and the money earned as commission on the books sold at the last Medical Convention.

Mrs. McCormack moved that the Board extend a rising vote of thanks to Mrs. Bernard



Asman and Mrs. Wier for successfully managing the Style Show benefit in Louisville in March.

Mrs. Luther Bach, Treasurer, reported that the total amount of money on hand is \$130.50, of which \$24.45 is in Jane Todd Crawford fund and \$106.15 in the general fund.

**Cold Abatement**—Mrs. Joseph E. Wier.

The Louisville Courier-Journal carried a feature story about our work for Cold Prevention. The City Health Department and State Board of Health are requiring all employees to wear masks if infected with a cold. Some few masks have been worn at Women's Club meetings. Several druggists have stocked masks at our, and the public's, request. The Sewing Unit of Jefferson County Medical Auxiliary has made masks to be used at a downtown clinic upon request.

Mrs. Evan Garrett, Calloway County President, gave a very impressive report reminding us of the value of standing closer together in these trying times. She reported that four young doctors from Calloway County had been called by the defense program. The Auxiliary program for eradication of tuberculosis in the county continues through the Health Department. Tests are being offered and given and pre-school children examined. She reported four meetings of the Calloway Auxiliary—Dr. Austin Bell having been guest speaker at one meeting. They report eighty-five health talks, three Hygeia subscriptions and interest in the Jane Todd Crawford project. The most impressive plans perhaps are those for Doctor's Day. She states:

"Our tentative program is to reach every person in Calloway by paper, pulpit or program. We are to have a dinner honoring those doctors already gone on and those who are laboring now. An able, efficient speaker who knew many of our pioneer doctors as well as those now practicing will be the feature of the evening.

"A memorial service for the 70-75 who are buried in Calloway will be in charge of those whose services are next to a physician's in the heart of the people—the ministers. These good men have adopted the plan of using the subject, "Our Country Doctors" for their sermon text the last Sunday of May. Societies in each church will assist the Auxiliary in placing wreaths on each grave."

Her parting message should make all Auxiliary workers more appreciative of our Auxiliary advantages and privileges.

Other county presidents who attended briefly reported their work.

The President asked that Mrs. Bach serve on the Nominating Committee to replace Mrs. Caldwell who resigned.

Mrs. McCormack suggested that a letter of condolence be sent to Mrs. Austin Bell from the Executive Board in session; also that a letter be written to Dr. W. E. Gary, Hopkinsville, because of his being elevated to the office of president.

Mrs. Bernard Asman was named general chairman of the State Convention, Mrs. L. J. Hackett publicity chairman, Mrs. Joseph E. Wier printing chairman for badges, Mrs. Joseph Barr exhibit chairman, Mrs. Wier chairman of reports.

A letter from Dr. McCormack in regard to legislation was read.

A letter from Mrs. W. M. Salter, Research Chairman of the Auxiliary to the Southern Medical Association, was read in which she offered the use of program material.

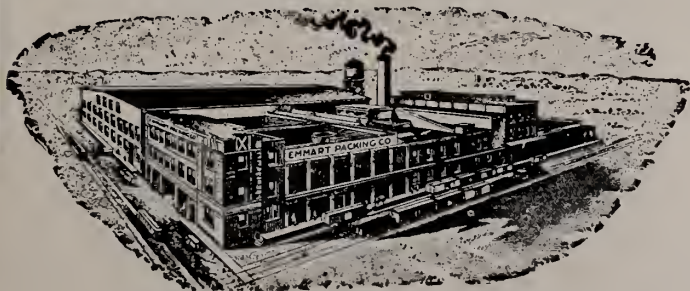
Mrs. M. Pinson Neal's letter of invitation to the Southern meeting at St. Louis was read.

Respectfully submitted  
(Mrs. D. P.) Lois Dehart, Acting Secretary.

I had no shoes and complained—  
Until I met a man who had no feet.

Arabian Proverb

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**ACHIEVEMENT CONTEST****Mrs. R. T. Layman, Elizabethtown,****Program Chairman**

I have received good reports from several counties. Some are having outstanding programs. I trust all Counties are working for the Blue Ribbon. I would be glad to have final reports from all Counties by August 15th, so I can make my report to the State before the State Meeting.

I hope to meet each County Chairman at the State Meeting. If new officers have been elected for the next year, please send names of new officers to me.

Looking forward to meeting you in Louisville this fall!

**ATTENTION COUNTY AUXILIARY HISTORIANS!****Mrs. C. C. Howard, Glasgow, State Historian**

Will every County Auxiliary Historian please remember that it will be greatly appreciated if she will send the State Historian a summary of her year's work? She is quite anxious to make a worth while report at the State Meeting. Her report is dependent upon the individual Auxiliary Historians' reports for its success.

Miss Bess Howard, County Court Clerk of Barren County and a member of Sampson Community Hospital Medical Auxiliary, has unearthed a most interesting booklet among the records of the County Clerk. This is an account book of the late Dr. Joseph W. Barclay, (occasionally the name is spelled Barkley), for the years 1829 and 1830.

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This contains accounts of visits to families of many of Glasgow's citizens of that age, some of which are the Ritters, Gorins, Yanceys, Reynolds, Giddings, Gillocks, Martins, Bushes, Dearings, Trabues, Jenkins, Scruggs, Jones, Logans, Thompsons, Bagbys, Helms, Goodens, Stocktons, Colemans, Montagues, Murrells, Curds, Eubanks, Bransfords, Hamiltons, Tompkins and Buckners.

Many unusual items and antiquated terms are found throughout the book. It is a treasured find.

**CANCER CHAIRMAN'S COMMENTS**

Now that the Cancer Drive is over I am wondering if we of the Medical Auxiliary feel that we have been at least a little responsible for whatever success it attained.

As your State Chairman may I ask each County Auxiliary that took any part in this Cancer Drive, whether you did take part as an Auxiliary member or, in conjunction with some other club, please send me a report of what part you did take. This is the only way we will be able to give a report for the State meeting.

May I take this opportunity to thank each and every one who did ever so little to help make it a success.

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## News From The Counties

### CALLOWAY

With the assistance of ministers, church circles and the press, our Auxiliary has planned to observe Doctor's Day throughout all of Calloway County. Hugh McElrath, D. D. S., will be the speaker at a dinner given by the Auxiliary to honor the Pioneers in Medicine. We have approximately seventy-five on our Honor Roll and about twenty-five more living and practicing in Calloway County.

Mrs. Starks of Kirksey has been assisting us in locating graves of our pioneers. She is arranging to have wreaths to place on these graves, Memorial Day. Mrs. Starks was the first president of Calloway County Auxiliary. Few are better qualified than she to know these Pioneer Doctors.

Miss Marilyn Mason visited her parents, Dr. and Mrs. Robert Mason during the Easter holidays. She is a student of North Western University, Evanston, Ill.

Dr. Ora Mason has had many visitors this Spring to enjoy her beautiful garden, especially the gorgeous wisteria which is a profusion of blossoms.

Dr. Hugh Houston is improving; he is still confined to his new home. Here he can enjoy the vista of beautiful flowering trees from the window of his room, which no doubt is a source of comfort while he is shut-in.

Dr. J. A. and Mrs. Outland are busy working on the campaign for the Early Diagnosis of Tuberculosis.

Dr. Evan Garrett has been called to serve with the Fifth Corps Area at Fort Hayes, Ohio. His family will go to Ft. Hayes Ohio.

Mrs. C. H. Jones will carry on the Auxiliary work until election of officers in October.

### CAMPBELL-KENTON

Lysle Bach, the young son of Dr. and Mrs. Luther Bach, of Bellevue, once more received superior rating for his excellent performance with the flute in the High School Music Contest. We are proud to say this is the third year Lysle has taken this honor.

The members of the Campbell-Kenton Auxiliary sponsored a bridge party given at the home of Mrs. John Dawson. Proceeds were given to the Women's Field Army for Control of Cancer. Amount \$25.05.

### FRANKLIN

The May meeting (May 8) of the Woman's Medical Auxiliary of Franklin county met at the home of Mrs. M. C. Darnell on Conway street with Miss Lena Benton as co-hostess. The president, Mrs. Thomas Leonard, presided at the business meeting.

It was decided to have a regular meeting on Wednesday, May 28, and to celebrate Doctor's Day. At this time Mrs. M. C. Darnell will give her paper on the pioneer doctors of Franklin county and the entire meeting will be concerned with the thought of honoring these heroes of early medical history.

Christmas cards were brought to be used in making scrapbooks for shut-ins and children in the hospital. Mrs. Joseph Barr is the chairman of this group to make the books. Mrs. John South displayed a book she had made and gave helpful suggestions.

Mrs. M. C. Darnell was in charge of the program. She presented Mrs. Reba Burrow Flynn who gave a reading and Mrs. R. M. Coblin who sang, "Run Mary Run," "Were You There," and "Shortnin' Bread." Mrs. William Vatter accompanied her at the piano. A social hour followed with Miss Susan Darnell and Mrs. John Darnell assisting the hostess in hospitalities.

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The Women of the Franklin County Auxiliary were accorded a rare treat when for their May meeting they were entertained in the home of Dr. and Mrs. M. C. Darnell. Perhaps most appealing to the feminine minds were the antique dolls—three of them—now more than sixty years old, which once belonged to Dr. Wm. L. Sutton's little cousin, Eva Macklin, of Frankfort.

The prize exhibit is the baby doll—with a beautifully modeled face and hands of bisque, almost perfectly preserved, and body of jointed kid. It wears the complete layette of a real baby of sixty years ago—petticoat after petticoat on bands that pin around the waist, and each a little shorter than the one underneath it.

The little garments on all of the dolls are entirely hand-made with exquisite small stitches and replete with dainty tucks and embroidery.

Another most interesting and lovely doll in the Darnell collection has the features of a dainty little girl about three or four years. Her costume too, is interesting—a little flowered dress of muslin, with all the necessary adjuncts, including red stockings and the inevitable flannel petticoat.

In viewing these beautiful little creations of yester years, we cannot but ask: Would any sane woman spend days and weeks over such handwork, expecting it to be "born to blush unseen?"

### *Doctors, Too, Have Hobbies*

Another most interesting and highly prized antique in the Darnell home, which we were privileged to examine, is a medicine chest of walnut, entirely handmade by a pioneer physician of Woodford County, Dr. Aaron Darnell (1761-1816), the great-grandfather of Dr. M. C. Darnell. This pioneer physician was born in Virginia, but came to Kentucky in 1789. He enlisted in the Revolution at the age of fourteen, serving first as drummer and fifer, and later as one of Daniel Morgan's riflemen. His old mortar, which was hollowed from a solid block of stone, and the pestle with which he ground his medicines, is now in the possession of another of his descendants.

A handsome piece of furniture is this medicine chest today, standing approximately 36 inches from the floor, mounted on legs, and the top about 20 inches square. When the top is raised, it reveals a cabinet built into the upper section, while in the lower part, when the door at the front is open, it reveals two drawers which held the instruments of Dr. Aaron Darnell.

The following members were present: Mrs.

John South, Mrs. F. M. Travis, Mrs. R. M. Coblin, Mrs. M. C. Darnell, Mrs. James Darnell, Mrs. Joseph Barr, Mrs. L. L. Cull, Mrs. R. B. Flynn, Mrs. C. E. Youmans, Miss Helon Travis, Miss Dorothy Darnell, Mrs. W. W. Ward, Mrs. R. D. Barton, Mrs. Thomas Leonard, Mrs. R. M. Fort, Mrs. N. O. Kimbler, Mrs. Ansel Nooe, and Mrs. West Hill.

Mrs. L. T. Minish and daughter, Mrs. Will Walker Ward, entertained the Woman's Auxiliary of the Franklin County Medical Society, May 28, at the home of Mrs. Minish on West Fourth street. The entire house was attractively decorated with varicolored summer flowers. At the conclusion of the program delightful refreshments were served.

In the absence of the president, Mrs. T. M. Leonard, Mrs. Joseph Barr presided at the business session. The highlight of the program was a paper "Doctors of Franklin County," ably prepared and presented by Mrs. M. C. Darnell, which covered principally the work of two Franklin County physicians, Dr. U. V. Williams and Dr. E. E. Hume, Dr. Hume being the father of Mrs. Eleanor Hume Offutt. Mrs. Darnell's paper is being entered in the current contest sponsored by the American Medical Association. The meeting was dedicated to honoring the country doctors.

Members and guests present included Mesdames Jesse K. Lewis, R. M. Coblin, John G. South, F. M. Travis, Reba Burrow Flynn, L. L. Cull, E. K. Martin, R. M. Fort, R. D. Barton, E. C. Roemele, Joseph Barr, M. C. Darnell, N. O. Kimbler, Ansel Nooe, C. E. Youmans, West T. Hill, Miss Lena Benton, Miss Ella Kemper, and hostesses, Mrs. Minish and Mrs. Ward.

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## GRAVES

The March meeting of the Graves County Medical Auxiliary was held at the home of Dr. and Mrs. J. H. Shelton on March 18th. with Mrs. J. M. Atkins in the chair. Eight members and two visitors were present. Mrs. Atkins described the recent banquet honoring doctors and their wives, given in the Woman's Club house at Murray, Ky. The Auxiliary voted to donate one year's subscription of Hygeia to the Graves County Library. Cancer Control booklets were distributed; Mrs. H. V. Usher, Program Chairman, explained the Achievement Project and reviewed "The Doctor's Wife." After this interesting meeting, refreshments were served by Mrs. John Shelton and Miss Ruby Shelton.

At the meeting of the Graves County Medical Society, March 15th, Dr. H. V. Usher was elected President of that organization with Dr. W. H. Fuller Vice-President. Drs. Stilley and Henson were guests.

The entire personnel of the Graves County Health Department headed by Dr. N. M. Atkins attended the regular district meeting of the State Department of Health at Paducah.

Miss Jane Flannigan of Louisville has accepted a nursing position with Graves County Health Department. She is the fourth nurse to be added to the staff since the unit was installed in 1939.

At the April meeting in the home of Dr. and Mrs. D. N. Ray, plans were made to decorate graves of deceased Doctors on Decoration Day;

Mesdames H. H. Hunt, R. G. Ashley, W. T. Vaughn were appointed to locate the graves of the Doctors. Committee reports were read and the President urged the women to continue work with the Red Cross. After the regular business, Mrs. Ray and daughter, Carolyn, served refreshments.

Doctor's Day and Memorial Day, May 30, were observed by Graves County Auxiliary with a luncheon at the home of Dr. and Mrs. H. H. Hunt, Mayfield.

The morning session was given to placing wreaths on graves of deceased doctors at Maple Wood and at Highland Park Cemeteries.

The following list gives names of the deceased (Graves County) doctors known throughout Kentucky:

Doctors: Jeff Pryor, D. C. Wather, John Hunt, E. A. Stevens (President of Mayfield Hospital Staff), H. A. Shelby, R. J. Howard, Thomas S. Terrell, G. T. Fuller, George T. Fuller, Jr., S. J. Matthews (who delivered the Mayfield, Lyon Quints), J. L. Dismukes, John L. Dismukes, Jr., John Holefield, J. H. McCary, R. J. Neal, W. A. Boyd, J. D. Landrum, Dr. Rhodes, D. R. Merritt, J. F. Kirksey, M. W. Hunt.

This poem fits the lives of these deceased Doctors:

*Greatness*

"I like a man who faces what he must  
With step triumphant and a heart of cheer,  
Who fights the daily battle without fear.  
Sees hopes fail, yet keeps unfaltering trust."  
"That God is God—that somehow, true and just,  
His plans work out for mortals; not a tear  
Is shed when fortune, which the world holds dear,  
Falls from his grasp; better with love a crust  
Than living in dishonor; envies not,  
Nor loses faith in man, but does his best,  
Nor murmurs at his humbler lot,  
But with a smile and words of hope gives zest  
To every toiler. He alone is great  
Who, by a life heroic, conquers."

—Selected

A social hour followed the luncheon, then Mrs. N. M. Atkins called a business meeting which she opened with prayer. This was followed by Committee reports.

Mrs. H. V. Usher, Program leader, asked the Doctors' wives each to give a short sketch of her husband's life. Mrs. R. G. Ashley was the first to respond, then in order Mrs. N. M. Atkins, Mrs. W. J. Shelton, Mrs. W. S. Hargrove, Hickory, Mrs. H. V. Usher, Sedalia, Mrs. J. H. Shelton, Mrs. Andrew Mayer, Mrs. Jacob Mayer, Mrs. W. T. Vaughan, her son, W. O.

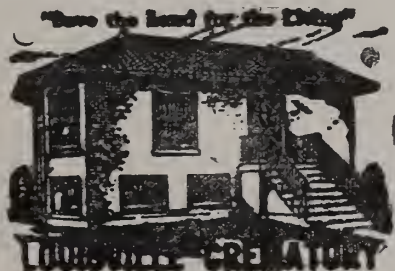
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Vaughan, Nashville, Tenn. Mrs. Hunt, the hostess, told us that Dr. H. H. Hunt was the oldest Doctor in point of service in Mayfield and he is also life time Secretary and Treasurer of the Mayfield and Graves County Medical Society.

Dr. M. Page, Cuba, and family have returned from a trip through Tennessee, Georgia and Alabama following the graduation of his daughter, Miss Beth Page, from Bethel Woman's College, Hopkinsville.

Dr. Pierce Ray, Mayfield dentist and son of Dr. and Mrs. D. H. Ray, is Oral Surgeon in the station hospital at Camp Davis, North Carolina.

Miss Jincy Hunt has returned to Panama, Balboa Heights, after a visit to her parents, Dr. and Mrs. H. H. Hunt, of this city. Miss Hunt works in the Civil Service Department.

Miss Hunt sailed from N. Y., May 29, and reached her destination, June 4.

I am profitably engaged in reading the Bible.  
Take all of this Book upon reason that you can,  
And the balance by faith,  
And you will live and die a better man.

Lincoln

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### HARDIN

The April meeting of the Hardin County Auxiliary was held at the home of Mrs. Joe Fowler. Officers for the new year were elected:

President—Mrs. R. T. Layman.

Vice-President—Mrs. George Bradley.

Secretary—Mrs. W. R. Bethel.

Treasurer—Mrs. E. E. Johnston.

Mrs. W. S. Field of Chicago spent ten days, as guest of her daughter, Mrs. Garnett Bale, during April.

Dr. Millard Bethel of Durham, N. C. spent several days in Duke Hospital suffering from a kidney stone.

Dr. C. F. Long and family are enjoying their vacation. Dr. Long planned to attend the A. M. A. in Cleveland en route to the West. They expect to spend four to six weeks in travel.

Dr. H. R. Nusz who was injured in a car wreck in December is able to open his office again this month after so many absent weeks.

Mrs. R. T. Layman spent two weeks in Prophetstown, Ill., visiting her son and sister.

One car filled with our members called on the nurse in charge at the Glendale Baptist Orphans Home in regard to the many cases of T. B. that have been discovered there. Our Auxiliary plans to take an active part to help eradicate this horrible plague.

Dr. Millard Bethel received his Masters Degree in Public Health, June 6, at University of North Carolina.

We are very proud to report the fine work being done by our new Health Department under the direction of Dr. Blandford. We feel that everything done has been worthwhile but best of all, the T. B. work in the Orphanage.

News of the death of Mr. W. C. Jenkins, father of Mrs. Will Bethel, came as a shock to the Community. Mr. Jenkins had just celebrated his 90th year on May 13. He passed away suddenly, June Second.

Dr. L. H. Layman, who is stationed at Georgia Camp, recently spent several days with his mother, Mrs. R. T. Layman.



## JEFFERSON

The Study Group of the Jefferson County Auxiliary, of which Mrs. P. E. Blackerby is President, held its April and May meetings at the Brown Hotel. In April, Miss Grace Stroud gave a splendid talk on the subject of "Health Problems in England." At the May meeting, Dr. Russell Teague of the State Department of Health gave an interesting and informative address on The New Pre-Marital Law and Pre-Natal Work."

During the past three months the Sewing Unit has made 337 articles, including hospital gowns, sheets, jackets, baby comforts, orthopedic aprons, dresses and layettes, which were distributed through the local agencies and the Red Cross. Meetings were held at the homes of Mesdames C. G. Arnold, Parks Ogden and Bernard Asman. On June 10, the Sewing Unit will meet at the country home of Mrs. Stephen C. McCoy to sew all day for the Red Cross.

Miss Elizabeth Wilson of the City of Louisville Service Club was the guest speaker at the quarterly luncheon, given in the Louis XIV Room at the Brown Hotel. Miss Wilson outlined the activities and objectives of the club and asked the cooperation of the Auxiliary.

Announcement is made of the birth of a son to Dr. Robert Monroe and Mrs. Monroe, and of a son to Dr. Louis O. Mitzlaff and Mrs. Mitzlaff.

One of the early members of Jefferson County Medical Auxiliary, Virginia Gags Davidson, widow of Dr. Harry A. Davidson, died April 15, 1941, at the Kentucky Baptist Hospital, Louisville.

If I might share  
A brother's load along the dusty way,  
Yet I should turn and walk alone that day,  
How could I dare—  
When in the evening watch I kneel to pray—  
To ask for help to bear my pain and loss,  
If I had heeded not my brother's cross?

—Author Unknown.

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## MADISON

The Regular Meeting of the Madison County Auxiliary was held at Boone Tavern, Berea, following a very delightful luncheon. There was a good attendance, a delightful musical program, and a short business session. Adjournment will be until the August Meeting.

Mrs. Shelby Carr, our President, is on a six week tour of the West accompanied by her daughter, Kitty Carr, Mrs. Chenault of Richmond, and Mrs. Shropshire, of Lexington.

Hansford W. Farris, son of Dr. and Mrs. J. D. Farris of Eastern State Teachers College, Richmond, a member of the 1941 Graduating Class, won the award for being the outstanding member of the first year advanced class and a medal of the United States Field Artillery Association.

Mrs. T. S. Hagan, mother of Mrs. O. F. Hume, our Secretary and Treasurer, has recovered sufficiently from a recent illness to be moved from the Hospital to the home of her daughter.

Mrs. John B. Floyd attended the National Tuberculosis Association Meeting with Dr. Floyd, in May. The meeting was held in San Antonio, Texas.

Mrs. J. H. Rutledge has returned from a visit with her daughter, Miss Louise Rutledge, who is taking graduate work at Peabody, in Nashville, Tenn.

Charles Rutledge, son of Dr. and Mrs. Rutledge, a senior Medical student of the Department of Medicine, Louisville, has accepted a position for the summer, on the Medical Staff, of the Defense Program in Charleston, Indiana.



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John B. Floyd, son of Dr. and Mrs. John B. Floyd, received a degree of Doctor of Medicine, Department of Medicine of the University of Louisville, in the June Class, of which he was President. He is a member of Delta Tau Delta social Fraternity and of Phi Chi Medical Fraternity. He is a graduate of the University of Kentucky. He will interne at Saint Elizabeth's Hospital, Covington.

Miss Grace Cornelius, Berea, Ky., was invited by Mrs. Keen Johnson, to sing two numbers of her own composition at the Colonels' Banquet held Derby Eve in Louisville. The songs, which Miss Cornelius sang for us at our March Meeting, are "Derby, Derby Day," and "Where the Sweet Kentucky River Flows." Miss Cornelius has sung songs of her own composition over the radio, and we, of Madison County Auxiliary, are very proud to call her one of us.

Mrs. Harvey Blanton and baby have gone to live in Gulfport, Mississippi to be near Dr. Blanton, who is stationed at Camp Shelby, Hattiesburg.

Mrs. A. W. Cornelius, one of our Vice-Presidents, attended A. M. A. Meeting in Cleveland, Ohio, in June, with Dr. Cornelius. She acted as one of the Delegates for Kentucky.

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### MARSHALL

The Woman's Auxiliary to the Marshall County Medical Society observed "Doctor's Day" with a dinner at The Kentucky Dam Cafeteria, June 29, 1941. 14 enjoyed the dinner, the following being present: Dr. O. A. Eddleman, President, Marshall County Medical Society; Mrs. O. A. Eddleman, President, Woman's Auxiliary; Dr. and Mrs. S. L. Henson; Dr. and Mrs. H. McClure; Dr. and Mrs. H. I. Halliday; Dr. and Mrs. V. A. Stilley; Mrs. Mildred Kincade Stinson; Miss Willoughby; Miss Ayre; Miss Ruth King.

A delicious dinner was followed by the story of the origin of "Doctor's Day" by Mrs. V. A. Stilley. She also spoke of the model patient, Mrs. Jane Todd Crawford and the part she has played in the surgical world. Dr. and Mrs. Eddleman reported they had that day placed flowers on the graves of Dr. W. T. Little and four other Physicians. Dr. and Mrs. S. L. Henson placed wreaths on two of the graves of Marshall County Physicians. Mrs. V. A. Stilley placed flowers on the graves of Dr. E. G. Thomas and Mrs. Thomas, Mrs. Thomas being the first President of the Marshall County Auxiliary.

### MERCER

The Mercer County Auxiliary met at the home of Mrs. E. V. Seay in Salvisa, Friday afternoon, May 23rd for the last meeting of the year. The Auxiliary held open house at the Doctor's Shop on May 30th for the Doctors of Mercer County and their wives and families.

The Doctor's Shop was kept open during the State Garden Tour, May 15, 16 and 17.

### THE SAMPSON COMMUNITY

The Auxiliary met in April with W. P. A. training school for Housekeepers Aid. Dr. C. R. Markwood gave a splendid talk on Tuberculosis, illustrating his lecture with charts.

Mr. John H. Harlin died on May 17th. after an illness of several months. Mrs. Harlin is our chairman of Archives.

Miss Marion Black has resigned as Superintendent of Nurses at Sampson Community Hospital to accept a similar position in Pittsfield, Illinois.

Mrs. Paul S. York was hostess to the Medical Auxiliary in May. Mrs. York leaves this month to join her husband, Captain Paul S. York, in Fort Jackson, Columbia, S. C.



Hospital Day with the annual "Baby Day" was observed here on May 12th.

Miss Eleanor Young Graham, daughter of Dr. and Mrs. James C. Graham of Greensburg, was one of the registration committee at the annual convention of the American Society of Medical Technologists which met in Cleveland, Ohio, June 3, 4, and 5 at Wade Park Manor Hotel. Miss Graham has been connected with the Veterinary College of Ohio State University as technician for three years and is doing graduate work in pathology. She is a graduate of Lindsey-Wilson Junior College and University of Kentucky.

Miss Mildred Howard, daughter of Dr. and Mrs. C. C. Howard, Glasgow, has just returned home from Lebanon, Ky., where she spent the past year as teacher of English and Dramatics in the Lebanon High School.

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#### A REAL OBJECTIVE FOR THE FRANKLIN COUNTY AUXILIARY

**Reba Burrow Flynn, Frankfort**

Perhaps one of the greatest present day needs of the little town of Frankfort is an improved hospital for its colored people. The Winnie A. Scott Memorial Hospital, located at 228 East Second Street, has for many years served as the ministering haven for the ill and suffering colored populace. Always inadequate for the actual needs of its people, it now is in a deplorable state, with little or no modern equipment, a building in need of extensive repairs, up-to-date wiring and lighting and other facilities. The members of the Franklin County Medical Auxiliary have assumed as their responsibility through the coming year the task of providing improved hospitalization facilities for the less fortunate colored people of its town.

A notable, progressive step was the delivery of a check for almost \$70.00 to the managing board of the Winnie A. Scott Memorial Hospital this month—the proceeds from a colored concert presented in the First Christian Church of Frankfort, sponsored by the Franklin County Auxiliary and under the able direction of Mrs. R. M. Coblin.

Already this very worthwhile objective has come to the attention of a large Bible Class of Frankfort—the Gertrude Shaw Class of the First Christian Church, whose president for the two years just past has been one of the Auxiliary members. This Class is offering a helping hand in a financial way, and in addition, has given a shower of canned fruits and vegetable juices for the hospital kitchen—a generous gift from its sixty odd members.

It will be interesting to note what other organizations in Frankfort and Franklin County through the coming months will catch the spirit of inspiration from these women, who already have earned a reputation of accomplishing much and succeeding in their objectives.

We do not think that a more worthy objective could be found.

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# Tuberculosis



Mrs. Lucius Ernest Smith, Louisville, State Chairman.

## TUBERCULOSIS AND NATIONAL DEFENSE

For months past we have been hearing a great deal about National Defense. National Defense may not mean the same to everyone, but the President's Fireside Chat, May 27, heralded by radio and press throughout both the new world and the old, leaves little room for rational doubt that the peoples of the Americas are entering upon one of the most critical periods of their history. The question, it seems, is no longer one of whether this nation or that nation shall stand or fall, but whether a great principle to which the United States has been pledged from its infancy, can withstand the terrific attacks of ruthless enemies upon the democratic way of life.

However much we may disagree regarding the gravity of the existing situation, one thing stands out today so boldly that he who runs may read. The democratic principles in which we believe are facing a crucial test. The struggle is going to be a long and trying one. Those who are best fitted to survive will win in the end.

The last world war presented problems which were altogether new to us. In seeking to solve these problems we made many mistakes. Persons, for example, were accepted for service in the armed forces of the country who were badly infected with tuberculosis. The tragic story is too well known to need dwelling upon here. Suffice it to say that not only was the fine war machine temporarily damaged, but many of our soldiers died with the disease while in service. Many more came home to spread tuberculosis among those they loved best. We are still paying, not only in money but in values not measurable in terms of dollars and cents, for our terrible mistakes in this regard.

Those in charge of recruiting for the country's armed forces—the army, navy, marine corps and air service—as well as those responsible for assembling a huge industrial army, are conscious of the mistakes of the past. They are alert to the danger of permitting persons infected with tuberculosis to enter into the strenuous life which confronts enlisted men in any rank today. Men and women are being rejected, not only when definite evidence of tuberculosis is found, but even when the findings are suspicious. Applicants with suspicious signs or symptoms are rejected until

the use of modern diagnostic methods has definitely shown that they are free from tuberculosis. In this way, every effort is being made to prevent the great burden of tuberculosis from being thrust back on the public when the war is over.

This fine Selective Service, however, is creating a new problem for us—a problem calling for immediate action in every community in the country. Of the young people being sent back to their homes because of tuberculous infection, some are in such advanced stage of the disease that they are spreading it to others; many are from poor families; some are from farms; others are from congested areas. Returning to their respective communities, discouraged and disheartened because they cannot

## PLAN CHRISTMAS SEAL SALE NOW AND FIGHT TUBERCULOSIS WITH KNOWLEDGE

Thus speaks the old slogan. We need knowledge, and more knowledge about tuberculosis. The educational material used in tuberculosis control programs everywhere is paid for largely with funds derived from the sale of Christmas Seals. These Seals are sold in Kentucky in November and December, but it is wise to plan ahead for the Seal Sale Program in your community. Thinking and planning ahead often make the difference between success and failure in a Seal Sale Program.

serve their country in its time of need, they present a peculiar problem in the solution of which a combination of social service, mental hygiene and competent medical advice must be blended in just the right proportions to meet the needs of each individual case. It is not enough to feel sorry for this rejected group; it is not enough to talk about it in our gatherings. We must organize and make it our business to see that our community is ready to supply what is needed to help these rejected young folks get what they themselves require, and also to protect others from them, should they happen to be spreaders of tuberculosis. Nor should we stop there. When that has been done, we must still look forward to appropriate rehabilitation programs, accommodating themselves to each individual case. Nothing short of this will meet the dictates of self-protection, public economy and humanity.



## A TRIP TO TOWN

Mrs. Henry Enos Tuley, Louisville

Frequently, I wait for the bus to take me to town, standing with token in hand—along with a quarter ready to buy three more for future use. I hate to have to open an envelope while people stand back of me waiting to pay their fares.

Have you noticed the almost invariable habit of women and men, of standing five or ten minutes waiting for a bus, then fumble through purse or vest or pants pockets for their fares, holding-up the driver who has too much responsibility, at best? They will do it. I said to a driver once when I asked for tokens, "I believe in preparedness." He replied, "I wish more people did."

Then there is always the moron who ignores the conspicuous red notice in front of his eyes, "Do Not Talk To The Driver While Bus Is In Motion." He talks glibly all the way! Even tells a joke and slaps the driver on the back!

Now, our lives are in the hands of the driver and with all the hazards he has to watch to avoid collisions, he can not do justice to his responsibilities and listen to either news or jokes at the same time. 'Pears like we ought to realize that, doesn't it? Invariably, these drivers are courteous men and excellent drivers. I note, too, that often it is men wearing the bus company's uniform who talk with the driver!

I see such amusing and interesting things during a bus ride to town! Not a pretty ride and through uninteresting sections over Billy Goat Hill, yet, made famous by Alice Hegan Rice. One morning I counted eight gum chewers in the bus, each with her own technique! Did you ever watch 'em? Male and female?

Chivalry? Well—I realize my age because so often a young girl gives me her seat, although frequently she sits beside a man. Once, all front and side seats were occupied by women, except the usual man up front entertaining the driver—I think the driver should be encased in

cellophane—when a very frail, tall woman, fully eighty years old, boarded the bus and clung to the post in front of that man (?). Finally, a woman passenger insisted on giving up her seat for her and a younger woman gave me hers. Did Mr. Man move? Not he. Chivalry? Courtesy? A sign advertising motor oil catches one's eye—illustrating the slogan "A Proud Moment"—a chesty young father pushing a pram full of triplets. Underneath it read "100 plus per gal." Construe it to suit yourself. I did.

Some months ago, the bus I was riding was held-up by a disabled truck lying across the road. Guess what 'twas loaded with? Eggs! Every one in the cottage neighborhood was out picking up cracked eggs. Such a mess of scrambled eggs one could never have imagined! A wrecker came finally and cleared the track but the truck driver had disappeared. Such a stylishly dressed girl sat beside me. I admired her costume and hat. Then, I noticed that one stocking was wrong side out!

There's a huge square red brick house on a hilltop, en route, that I'd like to buy and fix-up and occupy a room looking West. Such a view of sunsets, river and city would be a joy! I've always longed for a room, bath and view of the sunset. Some times I have one, sometimes the other, once in a while all three together.

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Then comes a glimpse of Cave Hill Cemetery with our gallant flag floating over graves of Civil war soldier dead—just one of many such sections of hundreds of cemeteries located all over our country. One thinks of another grave just over the hill where one lies who did his bit in the “war to stop all wars.” But, now again, our Nation is in tumult! If only the momentous questions could be settled by the ever-multiplying words and arguments and opinions, pro and con!

Some one had a bad cough. Wish she would cover her mouth. I'd like to offer her a tablet I have in my purse if only I could pronounce the name on its box. After taking one, once, I didn't cough again. Let's see. Here it is. “Diiodooxy-mercurioresorcinsulfonphthalein—Sodium 1-8 gr., Saligenin 1 gr. Directions—Hold a lozenge in roof of mouth until dissolved, etc. Take as directed by Physician.”

‘Round the corner into Baxter Avenue and I recall the Ohio River Flood and the famous Pontoon Bridge. All that is visable to remind one of that damp time is a sign “Pontoon Saloon” where one can now dampen a dry throat.

One morning I had to go in on an early bus and saw a little tot of three years, or so, trudging over the sidewalk in a business-like way, attired in a flowing nightie buttoned at the throat and flying gaily back of him. He car-

ried a hammer over his shoulder and I wondered if he might be on his way to an early meeting of the Knockers' Club.

My trip is but a twenty minute ride, but, if one is interested, there is much to see and hear and often real amusement. Sometimes, when High School boys and girls become too frolicsome, it is a bit nerve-racking; or, when a person with too many cocktails feels called upon to orate to the passengers. Often, one chats with pleasant seat-mates and finds mutual friends. Recently, a woman poured a heartful of trouble into my receptive ear. I hope it helped her. I have no idea who she is but tried to encourage her to hope for better things. Do I look sympathetic? Some folks seem to think so. One pathetic old person—I mean, older than I—said during our chat, “There's no place in the world for the old.” I felt sure she must be in that sad condition—dependent and unwanted. Another woman of ninty-two said to me one day, “I live with my son. His wife don't like me.” What could I reply?

We reach Second and Walnut and the Pendennis Club, a handsome building. Then on to Fourth Street, passing the site of the old George Keats Home, afterwards owned by B. P. O. E., right next to the site of the old Pendennis Club—full of memories of old Louisville—both sites now built into shops or given over to a parking lot.

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# JANE TODD CRAWFORD MEMORIAL

**Jane Todd Crawford**

**Essay Contest . . . .**

**WON BY MARJORY ROBERTS**

**In State Contest As Well As County Contest**

(Reprinted from: News-Journal, Campbellsville, Ky., February 6, 1941.)

The Woman's Auxiliary to the Kentucky Medical Association recently sponsored an essay contest for High School students residing in towns along the Jane Todd Crawford Trail. Miss Margie Roberts, of the Elkhorn section, entered an essay in this contest which was adjudged by the faculty of the High School, which acted as judges to be the best offered here.

Judges of the Medical Auxiliary will adjudge the various county winners and will announce the grand champion soon. Mrs. Lee Campbell, English teacher at the High School, was in charge of the local contest.

The essay in complete form follows:

## **JANE TODD CRAWFORD**

In our own state of Kentucky surgical history had its beginning when about one-hundred and twenty-eight years ago, Dr. Ephraim McDowell performed the first ovariectomy. Dr. McDowell lived in Danville, Kentucky, and it was in his home that he performed this amazing experiment. No anaesthetic was used, but he succeeded in opening the vast field of abdominal surgery.

We go back now as far as 1809. In a small cabin located on Blue Spring Branch, of Russell's Creek in Green County, lived Mr. and Mrs. Thomas Crawford. Mrs. Crawford being forty-six years of age and the mother of five children, suffered strange pains in her right side.

Frightened and very worried Mr. Crawford said, "Do you feel much better, Jane? Let me heat that salt for your side, maybe it'll help. Rest if ye can."

Between the sobs Mrs. Crawford replied, "Tom, it's terrible, it's terrible. I just can't bear it."

Trying to comfort her, he said softly, "I know it's awful, Jane, and it seems our doctors are helpless. They don't seem to know what's wrong. They claim there's a new doctor in Danville, I'm going to try him. I'll be back soon."

So Mr. Crawford called Dr. McDowell. This young man responded and rode sixty miles over ice and snow, to the Crawford home.

He arrived at the Crawford home and Mr. Crawford anxiously greeted him saying, "Ev-

enin', Doctor, we've been expecting you all day. Jane is suffering terrible, come right this way please."

Dr. McDowell went to the bed and began to examine her. As he continued, he suddenly realized he had reached the most important moment in his life. He found her abdomen greatly enlarged and knew the only cure was to remove the cause. He, too, thought of this husband and five children. He finished the examination and turned away. Mr. Crawford ceased pacing the floor and fearfully asked, "Well, Doctor, are we going to have another little one?"

Slowly and unwillingly the Doctor replied, "No, my good man, but your wife is suffering terribly. I am sorry to say but the only cure will be to remove the growth. It might not only cure her for it might also mean the end. If she will come to my home, I'll risk my reputation to perform my experiment."

The bewildered husband not knowing what to say and unable to bear the thought of losing her, went to her bedside and said, "Jane, the Doctor says you will have to have an operation and he wants to know if you are willing."

She slowly turned to her husband and said, "Thomas, I'm ready."

They prepared for the trip and made preparations for the children to stay at home. The horses were brought and the suffering mother tried to comfort her crying children by telling them she would be back soon. Mrs. Crawford, suffering untold pain, mounted the horse and rode those sixty miles.

On reaching the doctor's home she rested while they made things ready. The doctor's cook, Hannah, brought clean clothes, bowls of water, some clean blankets and cleared the kitchen table.

Everything was ready and Jane Todd Crawford, the bravest soul in surgical history, was brought in and placed on that crude kitchen table. Before starting the doctor took a prayer from his pocket and recited it. After he had placed his hope and trust in God, and had asked Him to direct his hands while performing this unknown operation, he began to cut through the flesh. The pain was almost unbearable.

Between the sobs of agony, Mrs. Crawford uttered weakly, "Yea, though I walk through the valley of the shadow of death, I shall fear no evil for thou art with me. Thy rod and thy staff they comfort me."

The doctor found the growth so enlarged,

he had to remove it in two parts. The moments passed very slowly and those brave souls had their rendezvous with death. Soon the place was closed and the first ovariectomy ever performed, was completed in twenty-five minutes on Christmas Day in 1809.

Dr. McDowell ordered his patient put to bed and under strict care. In five days he went to see her and was astonished to find her up making her bed. She returned to her family in twenty-five days, lived thirty-two more useful years and was one of Indiana's first Sunday School teachers. She died at the age of seventy-eight.

Dr. McDowell performed many more operations and was many times assisted by General Andrew Jackson. Dr. McDowell was married to Sarah Shelby, the daughter of Governor Isaac, of Kentucky.

#### HONORABLE MENTION

##### Essay

##### JANE TODD CRAWFORD

Mary Lou Nelson, Paintsville

Aged 12 Years

In Kentucky, about one hundred and twenty-eight years ago, the first Ovariectomy was performed by Doctor Ephraim McDowell.

If we turn back the years to 1809 we find ourselves in the two story log cabin of Mr. and Mrs. Thomas Crawford, located in Green County.

Mrs. Crawford, about forty-six years of age and the mother of five children, is afflicted with a painful ailment.

Mr. Crawford tries in vain to comfort his sick wife. But Mrs. Crawford thinks she cannot bear the pain.

Mr. Crawford sends for a young Surgeon, a daring Scotchman just past thirty-eight years of age, over in Danville, sixty miles away.

Dr. McDowell rode these sixty miles on horse-back and arrived at the Crawford home just at dusk on the cold day of December 13, 1809.

And within the lonely cabin with only the light of the fire Dr. McDowell started the examination of Jane Todd Crawford.

"Mrs. Crawford cannot live as it is and may not with an operation, but it is the only hope. It is but an experiment, and I will perform the operation at my home in Danville," announced the distressed Doctor.

Husband and wife discussed this plan and with unusual courage Mrs. Crawford decided to make the trip on horse back to Danville, sixty miles away.

Untold pain was suffered by Mrs. Crawford on the trip to Danville.

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A room in the McDowell home was turned into an operating room.

A prayer was recited by Doctor McDowell and then the operation was begun.

Jane Todd Crawford had no anesthetic and great was the pain. From her weak lips we hear these words, "Yea, though I walk through the valley of the shadow of death I fear no evil for Thou art with me. Thy rod and Thy staff, they comfort me."

In twenty-five minutes the operation is finished. Thus ended on Christmas Day 1809 the first successful Ovariectomy operation.

Mrs. Crawford was put to bed under strict orders. Five days later she was up making her bed, and twenty-five days later rode home to her husband and family.

Jane Todd Crawford lived thirty-two more useful years, and died at the age of seventy-eight.

#### HONORABLE MENTION

##### Playlet

##### JANE TODD CRAWFORD

Shelby Warren, Hazard

Aged 14 Years

##### THE CHARACTERS

Jane Todd Crawford—The wife of Thomas Crawford and mother of five children.

Thomas Crawford—The husband of Jane and the father of Thomas, Howell, Samuel, Alice and James, the children.

Dr. Ephraim McDowell—The surgeon.  
Hannah—Dr. McDowell's colored servant.

**Time:**—Early December, 1809.

**Scene:**—The two-story log cabin of Mr. and Mrs. Thomas Crawford, in Green County, Kentucky. Jane is ill from a severe pain in her abdomen. Thomas speaks to Jane.

##### ACT ONE

**Thomas:** Jane, are you feeling any better today? Maybe if I heated some salt and put it to your side that would ease the pain.

**Jane:** If you wish. Nothing seems to help. Even the doctors seem helpless.

**Thomas:** I've heard of a young Dr. McDowell, of Danville. Maybe he can relieve you in some way. I'll get in touch with him as soon as I can.



(Narrator: That day Thomas Crawford got in touch with Dr. Ephraim McDowell, of Danville, Kentucky, who came as soon as he got the message.)

## ACT TWO

**Time:**—December 13, 1809.

**Scene:**—The home of the Crawfords. Dr. McDowell has just ridden up. He speaks.

**Doctor:** Whoa, boy whoa.

**Thomas:** Hello! Are you Dr. McDowell?

**Doctor:** Yes, I am Dr. McDowell.

**Thomas:** Come in. Jane is in the next room.

**Doctor:** Mrs. Crawford, how are you this morning?

**Jane:** I'm not feeling so well. See if you can find what is wrong with me.

**Doctor:** Very well. I'll examine you right now.

**Doctor:** (After examining Mrs. Crawford, calls Thomas over to the corner.) Mr. Crawford, your wife is suffering from a growth in her abdomen. There is no cure with the exception of an operation. I am willing to take your wife to Danville to perform the operation. If I fail, your wife will die. On the other hand, if I succeed your wife will recover soon. Are you willing to let me take her?

**Thomas:** I am willing, but what about Jane? Will she want to go? I'll ask her. Jane, the doctor says that, in order to cure you, he must take you to his home in Danville. Are you willing to go?

**Jane:** Tell the doctor that I am ready. Samuel, get the horses.

(Narrator: And, on that day in December, Jane Todd Crawford began the sixty miles to Danville, where the operation was performed by Dr. McDowell.)

## ACT THREE

**Time:**—December 25, 1809.

**Scene:**—The home of Dr. McDowell, in Danville, Kentucky. Dr. McDowell speaks:

**Doctor:** Hannah, did you get the water and gauze as I told you?

**Hannah:** I'ze skeered dat dat poor woman gwine die. If dat biling water don't kill her, dat knife sho' will. Lord, Lord, what do this all mean?

(Narrator: On Christmas day, in 1809, Dr. Ephraim McDowell performed the first successful ovariectomy. It was done in twenty-five minutes, and the growth was so large that it had to be removed in two sections. Five days after the operation, Dr. McDowell found his patient up making her bed. Twenty-five days after the operation, Jane Todd Crawford returned home and lived to be seventy-eight years old. The latter part of her life was spent in good health.)

## ADDRESS

BY

**AUSTIN BELL, M. D., PRESIDENT  
KENTUCKY STATE MEDICAL ASSOCIATION  
At Executive Board Meeting of Woman's  
Auxiliary, November 12, 1940**

Kentucky's Auxiliary President commanded—I responded—hence my presence.

Life is filled with tragedies, most of which are useless and with proper precautions could be averted. The truth of this statement is peculiarly applicable to that profession which deals with the healing art, and the failure to recognize it, carries the greatest condemnation to those who claim to serve humanity in that line. Today, it is a generally recognized fact that all its members should primarily strive to prevent disease with its consequent suffering, incapacity, and mortality rather than cure the patient who is stricken. No other profession can boast the fact that the outstanding and paramount issue, is to eradicate those things which have brought remuneration to its members, yet that is the very thing emphasized by every true follower of Aesculapius; even in his day, preservation of human life was dominant. It is said "Pluto complained to Zeus that the prolongation of life on earth, due to the ministrations of Aesculapius, was keeping down the population of Hades. Zeus to restore the balance of population, slew Aesculapius with a thunderbolt," and this encouraged sickness and death, and the consequent increase in the population of the lower region.

Already much progress has been made in this crusade and many diseases have yielded secrets by which their incidence has lessened while others are entirely controlled. Yellow fever, formerly the scourge of tropical countries, where it was consequently found and from which it would spread at certain seasons, carrying death and desolation, is controlled by sanitation. Our nation suffered many epidemics in the Southland, until the manner of its spread was manifest and its control determined. Malaria, in its disabling illness, has proven the greatest scourge ever known and formerly every sickness was thought to be complicated with such infection. Today, frequent cases in any community, State or Nation, emphasize either ignorance in prophylaxis or unwillingness in executing necessary sanitation to eliminate breeding places for the mosquito, which is necessary to the continuance of this disease. France expended great wealth in an effort to construct a canal connecting the two oceans, but yellow fever and malaria proved so disastrous that failure resulted. Our own country rid Panama of these diseases, and the above mentioned task was completed, with marked

benefit to the shipping industry, especially with us. In this day of National uncertainty and peril the importance of this connecting link between the two oceans lashing our shores is attested, and our Statesmen seriously contemplate another canal—the Nicaraguan route—originally sponsored by Senator Morgan of Alabama—together with additional locks in that already constructed, thus insuring a quick and certain passage from the Atlantic to the Pacific. Mosquito elimination in the South is important. What worthier task could be undertaken by this Auxiliary?

Small pox in ancient times took a greater toll in human life than did the ravages of war, until Jenner accidentally discovered its prevention, and today its continued existence attests the ignorance and folly of the countries so afflicted. Strange as it may seem occasional epidemics occur due to lax enforcement of law and the venal attitude of some doctors in excusing from vaccination certain children. The frequency with which certificates emanate from the same doctor casts aspersions on his honesty of purpose and ethical standards. Enforced school attendance and exclusion of the unvaccinated could correct these evils.

Howard W. Haggard of Yale University states, (quote) "Scientific medicine in its beginnings were in mystery and superstition: its progress

encumbered with ignorance and quackery. Above these, it has risen to become the most beneficent science of the modern world. To overthrow superstition, to protect motherhood from pain, to free childhood from sickness, to bring health to all mankind: These are the ends for which, through the centuries, the scholars, heroes, prophets, saints and martyrs of medical science have worked, fought and died." Mark Twain in his book on Christian Science states "75% of man's ills are imaginary and that any cult, cure or would-be science, that appeals to the mind will cure many people." His percentage may not be correct but his deductions are only too true.

That quack, who unqualifiedly promises cure, regardless of the hopelessness of the case in question, is often accepted and followed in preference to the honest and candid physician who will neither lie nor mislead. Human nature is more willing to accept false teachings of the ignorant and unlettered, when cure is promised and mystery is involved, than the logical and true findings of the scientific who deal in things reasonably to be expected. It has been truly said that the civilization of our time is a thin veneer, covering the savagery and ignorance of the past, and the acceptance of services of the mushroom healers of today, who in a few weeks, go from every walk of life to licensed leaders in their supposed profession, with appellation of "Doctor", stresses the public's gullibility, and thinness of that veneer which separates modern man from the superstition of the past. Glittering generalities and blatant promises from the quack of pleasing personality, who takes himself seriously, often are accepted by intelligent people as evidence of marvelous capacity. A deeper study of this apparent truth clearly shows one who understands psychology and realizes the influence of mind over supposed physical defects and clearly stamps the fraud. Investigate these individuals who receive such miraculous restoration and either their troubles were imaginary, else their impressionable natures responded to the hypnotic influence of the "would be healer," and things were undertaken which were long since discarded and thought impossible. The shrewdness of the quack is demonstrated by the speed of securing a testimonial before the spell is dissipated; and usually the poor unfortunate passes on, to accept the next promise of the more recent breed of this same cult under a different name, if not overcome by the disappointment and chagrin of his own folly. The harm has been accomplished, and the greatly prized testimonial continues to enmesh others in the false hope of health, long after the pas-

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sing of him who gave it. Every age has its outstanding quacks and charlatans and ours is no exception. Canada claimed the floor and Locke twisted the foot of the lame, blind, halt and deaf, in each instance promising health and vigor, and the deluded sufferer under the mob psychology, claimed improvement.

A few of these came under my own scrutiny and time proved without exception the venality of both man and method. It was claimed his charge was small for each patient, but the aggregate is the same when a million each gives one dollar or one gives a million dollars. The honest doctor who exposed his methods and denounced the perpetrator had slurs cast at him and many questioned his motive.

The final scenes in such tragedies usually find the family physician at the bed side, ministering to the physical wreck and stepping aside with bowed head as the spiritual comforter offers guidance. After the last sad rites are said and those left behind repair to their homes, often desolate and without financial support, does this same quack do ought to relieve the situation? Rather he continues to play on the credulity of the public and offers false promises to others, on the testimonials of those who have already heard their last summons. A crusade against quacks by this body could carry great weight.

Cancer today is an outstanding cause of high mortality statistics of every nation. It is a well recognized fact that early diagnosis and prompt treatment offer cures in a large proportion of cases. Pre-cancerous conditions are recognized in the profession and persons having pre-cancerous lesions are considered potential cancer patients for the future. Many small masses favorably situated are removed by the Surgeon before neighboring tissues are involved, and that individual is frequently saved from suffering the death which so often follows its retention. The two most frequent anatomical locations are the breast and uterus. Woman's modesty is responsible for a tremendous toll, preventing her from divulging early indications, until symptoms are so compelling, that fear gains the upper hand, and she consults the doctor. Here is a favorite field for the quack, who heralds aboard in large print the claims too often fraudulent—of cure—and that case if successful, is the talk of the community, while the doctor, in his daily work cures many cases of which the public never hears. In this they are fulfilling a portion of the Hippocratic oath i. e., "Whatsoever in my practice—or not in my practice—I shall see or hear—amid the lives of men, I will not divulge, as reckoning that all such things should be kept secret." Many people resent the discussion



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of their physical defects and our profession holds such knowledge sacred.

The charlatan cries them from the house top! Education is the answer to this conflict, and today, such a campaign is being waged everywhere, that our people may know the probable early indications of cancer and the scientific method of handling it. Again the intelligence of this group is challenged by the increasing cancer morbidity and mortality and free dissemination of medical and surgical accomplishments through your influence can prove a potent factor in cancer control. An annual drive in every community could be worthily and profitably accepted as a major auxiliary objective.

Tuberculosis no longer holds first place as a lethal disease but the frequency of its occurrence and the gravity of such infection stresses the importance of renewed effort to seek and seclude those afflicted, until essentials of sanitation are taught and those contacted are protected from ignorance and neglect. Who can question the wisdom of Sanatorium training for all these unfortunates in the interest of public and private health? This group could sponsor adequate Sanatoria beds for the isolation, treatment and arrest of the progress of this disease to cover the needs of each community.

Howard W. Haggard said, "The position of woman in any civilization is an index to the advancement of that civilization; the position of woman is gauged best by the care given her at the birth of her child. Accordingly, the advances and regressions of civilization are nowhere seen more clearly than in the story of child-birth." Seven per cent of the deaths of women between the ages of twenty and

forty years are due to infection at this time. It is conservatively estimated 23,000 women die every year in the United States from its immediate and remote effects. One hundred thousand babies die in the United States every year during delivery, and another 100,000 die in the first four weeks of life. This is three times the number of men we lost in World War No. 1, and the deaths with mothers and babies are from causes largely preventable. Thousands of women enter our hospitals yearly, seeking surgical relief for injuries sustained when children were born and diseases incurred by childbearing. Nearly one-third of the blindness today comes from either ignorance or carelessness at this time. The legal requirements of the use of a silver solution in the baby's eyes at birth has lessened this incidence and could largely eliminate it. Its frequent occurrence is a sad commentary on routine care of the new born, for precautions used could and should largely prevent such distressing occurrences.

The bulk of our people feel that childbearing is amply safeguarded by nature, and the suggestion that a prospective mother should place herself under her doctor's care is often thought unnecessary. Too frequently those are consulted and accepted as capable of giving advice, who have borne most children, and rarely is investigation made as to the number of children lost in those families. The modern nurse should prove the guardian angel under these circumstances and her advice should be sought and followed. False modesty often prevents frankness with the physician, but the intimate contact with the nurse, and her qualifications by reason of training, eminently fit her for this most important duty. A correction

of these shocking results will come only when the profession is able to impress on our people, the paramount importance to the future of the race in preparing and safeguarding women at this period, and in this accomplishment false modesty, superstition and ignorance must be supplanted by scientific knowledge. Vital statistics showing the number of deaths each year and their causes, must be made public, and our people must be brought to face a new deal which offers greater safety to the parturient woman and her child. The medical profession must lead in this advance but it can give no more than the community will accept. Trained nurses, home demonstration agents and patriotic men and women must all join hands, and do everything possible to correct the evils of the past, and safeguard the future of our people. A properly organized County Health Department should prove a most helpful agency in the spread of the gospel of good obstetrics, and the high intelligence of the membership of our Clubs, and especially the women's clubs, should enlist hearty support and cooperation in this accomplishment. Then and, only then, do we as a people properly take our place as leaders of civilization, by showing to the world that womanhood and motherhood are given positions of pre-eminence. The tragic ending of many obstetrical cases could have been averted by proper care and attention, and many desolate homes could hear the happy prattle of the child, were our people alive to the gravity of neglecting things so full of promise.

Much could be said about the high death rate in early life and a doctor's journey is filled with many tragedies which he has witnessed. Advances in recent years have saved thousands, but dissemination of knowledge among the masses is still urgent in protecting childhood. Sera of different types are now used in the prevention of diseases, and our schools are active disseminators of their use. The opportunity is given for such protection and the "blue ribbon" stimulus has proven a strong one.

Too much cannot be said for that splendid body of men and women who comprise the public school teachers in every town and county. Their efforts will live in the lives they have touched, the minds they have trained and the hearts that have been purified by Christian influences ever dominant in their teaching. It

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is true that our country was founded on civil and religious liberty and worship of God as consciences dictate. But, who among us would willingly have as teachers in our schools, men and women devoid of religious belief, or who in their class room, through the press or in writings of any type, openly advocate those things undermining moral standards and subversive of all that we held pure and holy? You should constantly safeguard our children through active interest in the continuance of the most capable and efficient teachers and encourage the filling of vacancies from the best available.

Our modern civilization has brought many problems that we must face and overcome in womanhood. She is not as vigorous and strong as the women of the past and her mode of life tends to lessen her capacity for safe childbearing and the physical vigor of the child. Tobacco and alcohol are menaces of serious moment, and their intemperate use unquestionably will tell in the future of a nation. Nervous diseases are on the increase and those things that add to the instability of women will naturally show ill results in years to come with men and women. Our mental hospitals are full and overflowing and conditions existing there have been truly appalling. Marked development and great advances have been made in the care of the unfortunates but this is only suggestive of the vast changes indicated.

The cure is an active interest in freeing these institutions from politics and a continuance in office of those officials who render faithful service and who manifest humanitarian desires. The pernicious practice of a change in the Medical Staff and personnel with each administration is a disgrace to any civilization and a criminal neglect of sacred obligations. An aroused public conscience is the only possible guarantee to the correction of these injustices and the exaction of promises from our nominees is essential. Governor Johnson has definitely committed himself to a correction of these evils and has already done much to place Kentucky Institutions on a scientific basis and the future promises much in the care of our unfortunates. Another challenge to your intelligence and activities with an objective of transcendent importance!

"Knowledge is power," and dissemination of facts of every kind which influence favorably the moral, mental and physical future of our people, will bring to this nation a civilization which future historians will acclaim and applaud. Each of us should strive to have an integral part in this program and have an ambition that America, and American ideals, lead the world, and that desire should be so compelling as to wish for the South first place in this most worthy undertaking.

Many professional problems might rightfully take their places in a discussion such as this, and the future holds high the promise of avoiding many tragedies in life's battle, when intelligent men and women enter wholeheartedly in the field of preventive medicine and recognize its true worth to all the people of earth. Then and not until then, may we expect our children to enjoy the rich heritage to which they are justly entitled. The gospel of good health for all our people is the ideal toward which we should strive, and in its consummation we must be conscious of the tendencies of the times. It is your task and mine to preserve for our civilization those things that make life worth while and to guide our people along wise and sane lines and accomplishment of this duty carries with it public and unselfish service, which espouses every worthy cause and courageously battles every effort of designing men and women to foster measures that in days to come will prove harmful to State and Nation.

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## MUSIC AND MEDICINE

Mrs. Alfred S. Maschke, Cleveland\*

Culture in its broadest sense may be called the highest phase of civilization, the educating or drawing forth of all that is potential in a man, training all his energies and capabilities to the highest pitch, culminating in a fine character capable of appreciating the offerings of man himself at his highest development; music, literature, art, and science. Such a man is truly cultured and such a man is happier, for he is more conscious of beauty in the world; and one who is conscious of that can not be a danger to civilization; therefore all the time and energy that we can spare should be used to preserve culture.

Music is the most accessible of the arts and from time immemorial its cultural value and even its value as a therapeutic agent has been appreciated. Apollo is God of both Music and Medicine (Greek Mythology). We may thus consider them as sister arts.

In an Egyptian papyrus (2500 B. C.) mention is made of the employment of musical incantation for increasing the fertility of women. Ancient Homer, several thousand years before Christ, spoke of the employment of music to stop hemorrhage in the wounded Ulysses. Polybius (Greek historian, second century before Christ) dilated upon the beneficial effects of music in soothing the troubled mind and becalming the perplexities of the spirit, and, remarkably enough, in speaking of the musical race of Arcadia contrasted the gentleness of their manners with the cruelty of the Cynetes, who neglected the cultivation of music. Pythagoras, about 582 B. C., regarded music as an admirable remedy for bodily and mental ailments. Democritus states that "in many diseases the sounds of the flute have been a sovereign remedy." Aulus Gellius (Roman Grammarian second century after Christ) relates "It is a belief widely scattered that a man afflicted with an attack of sciatica feels the intensity of his illness sensibly diminished, if any one, playing close to him, elicits soft and melodious sounds from a flute." Celsus (one of the most famous Greco-Roman Physicians) recommended flutes, cymbals, trumpets and other noisy instruments, for the demented. And who does not know of Saul whose sorely tried spirit was soothed by the playing of David. "When the evil spirit from God, was upon Saul, David

took his harp and played and Saul became refreshed and was well."

According to the medical historian, Hecker, music was employed effectively against the dancing mania\*\* of the middle ages. The governments of the afflicted countries learned that music was a valuable remedy in these epidemics and actually hired musicians to play before the populace in order to dispel attacks. Spencer, Diderot, Rabelais and the late Sir Frederick Mott all acknowledge the force and therapeutic value of music. Doctor Robert Schauffler has suggested a veritable musical Pharmacopia for our ills.

Sound, the basis of music is a force, like heat, light, and electricity and possesses the fundamental physical properties of motion. Speaking more specifically, music is a force, the elective action of which is confined to the field of the human emotions. For many years now, scientists have been paying close attention to the effect of music upon the psychotic patient. That patients have derived great benefit from such activities, was the conclusion reached. The systematic utilization of music is one of the latest additions in the treatment applied today in the hospitals for the mentally ill. Some of these institutions now have resident musicians as members of their staffs.

There are few people indeed who are not affected in some way by one or another form of music, be it simple or complex. The term applied to the use of music in the healing art is melotherapy. Music with the present day means of broadcasting, reappears in her old association with medicine, serving as a useful auxiliary, at the bedside of the sick and convalescent.

Professor Albert Einstein in the April issue of the musical magazine Tempo, says that it seems to him that, "We in our times do not sufficiently appreciate the significance of an active participation in music, as a means of development and of finding true happiness. A constant activity in music will contribute much toward the building up of a well rounded character and the enriching of the soul and offers an escape in hours of disillusionment and despondency. Because of the possibilities afforded by it to explore and relieve depths of emotion, music offers compensation for what one may miss in personal relationship."

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\*Mrs. Maschke is chairman of Music for the Cleveland Academy of Medicine and was Chairman of Music for the 1941 Convention of the Woman's Auxiliary to the American Medical Auxiliary. The above was prepared for the 1936 Membership Drive of the Cleveland Academy of Medicine.



**HEALTH PROBLEMS OF ENGLAND\*****Grace Stroud**

Last fall the Vice-President of the Royal Society of Medicine said that unless every law of medicine was broken a terrible pestilence would break out in Europe this past winter but in March reports showed that the people of Great Britain were healthier than they were before the outbreak of war. After months of bombing and despite the hardships of war, the evacuation of large numbers of persons from one area to another and overcrowded, unsanitary air raid shelters, the expected epidemics have not materialized.

The history of this war will show that in Britain's struggle none deserve more credit and praise than the medical profession. The well-known tenacity and calmness of the British race is nowhere more in evidence than among Physicians and nurses. They quietly go about doing the job at hand whether it be in a well-equipped hospital or on the street with bombs bursting around them. Some have even had to rescue their equipment from a wrecked operating room, carry it out to the street on stretchers or in their pockets, quickly improvise a new operating room wherever space could be found and continue the dressing of wounds.

A number of Physicians have been killed. In some cases, financial aid has been given the widows and orphans by the Medical Societies. Many other Doctors have lost their loved ones, their homes and their offices. Every Physician is carrying an extra burden because thousands of civilians are injured every day for bombs, splinters and flying glass and traffic accidents have doubled because of the nightly black-outs. Private practitioners care for as many extra cases as their own practice will allow. Great Britain also has a system of Panel Practice in which Doctors are hired to care for the low-income group which is protected by compulsory health insurance. Their load is much heavier, too.

A close watch on conditions affecting public health is being maintained. Steps have been taken to provide against not only the dangers always present in time of war, but also those likely to result from troop movements and the evacuation of large groups of people from one place to another. These throw an added burden on the health services. Extra precautions are being taken to assure a safe milk supply, there has been an extension of the chlorination of water and emergency laboratories have been established to assist in the rapid detection and suppression of any outbreak of infectious disease.

\*Read before the Study Class of the Woman's Auxiliary to the Jefferson County Medical Society, April 17, 1941.

In the House of Commons, the Minister of Health, Mr. Malcolm McDonald, son of Ramsey McDonald, gave a survey of health problems. Although Physicians were working under almost unbearable conditions, the general health chart was surprisingly good, he said. The maternal mortality was the lowest ever recorded in the country; 2.82 per thousand births in 1939. In that year, 50 children per thousand died before their first birthday. That also was the lowest figure ever recorded and was less than half the figure for 1914, the first year of the first World War. The death rate from Tuberculosis did not show any decline but was less than half the figure for 1914. There was a reduction of 44,000 from the number of contagious diseases reported in pre-war 1938. Scarlet fever cases were reduced from 100,000 to 63,000. There were fewer than 3,000 dysentery cases in 1940 as compared to 4,000 in 1938.

The Minister of Health then spoke of the problem of providing proper shelter for the millions of Londoners during air raids. The private shelters in suburban districts are comparatively ideal. Surface shelters have been provided in many streets but thousands prefer the discomforts of subways for the feeling of safety their great depth gives. There is also a freedom from the noise of bombs and anti-

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aircraft gun fire. Subway platforms were used by 186,000 people during the month of September but that number has dropped now as more private shelters are being dug in back yards.

But subways were never built for human habitation and many are the problems resulting from their use. The fundamental ones are overcrowding, dampness due to faulty roofs and flooding of entrances with storm water, poor lighting, in some, no means of heating in cold weather and in many an absence of a piped water supply. Fans have been installed in some for ventilation and electric heating has been experimented. Mosquitoes have proved a source of trouble where large collections of stagnant water have been found.

Often as early as 3:30 in the afternoon children and old people begin drifting into the shelters. With their blankets, suitcases, folding chairs and pillows they are prepared to remain until morning. Provision of sanitary conveniences is a very serious problem. Station platforms where the people sleep are below drainage level and sanitation can be provided only by means of chemical toilets. At first, the disposal was by manual labor but now sewage ejectors have been installed in some places. The provision of one toilet for every 20 persons is the aim of the government.

The frequent inspection of shelters by Health Officers is required. Each shelter has a warden and short courses on Health in the Shelters have been given each warden. A series of leaflets dealing with special problems such as sanitation and infectious diseases have been distributed. Each shelter accommodating more than 500 persons is a first-aid post and should

have a space provided for the partial isolation of sick people. They try to have a nurse in attendance and a Doctor either on the spot or within call.

There is a rule that people suffering from infectious diseases should be taken out of the shelter and accommodated in hospitals but it is a hard one to enforce. A real effort has been made to evacuate all Tuberculosis cases or enter them into hospitals for the damp, poorly ventilated air aggravates their cough, but because of the propaganda that Nazi air raiders deliberately bomb hospitals (50% of all of the hospitals in England have been damaged) it is difficult to get them to enter. When they do use public shelters they are urged to wear masks. All persons suffering from colds and coughs are requested to use masks, the cellophane ones being preferred. The gauze type, tied on with tape, are suggested if the others are unavailable. It is expected that the stuffy, germ laden air will increase the number of catarrhal diseases, bronchitis and pneumonia.

Every inducement has been offered to evacuate all children but a very large number remain. Every child using a public shelter is examined by a Physician with the object of checking the spread of infectious disease. There are 11,500,000 children in England under the age of 15 years and the Ministry of Health hopes to immunize at least half of them against diphtheria by this spring. Small-pox is being controlled by vaccination. There was only one case reported in 1939. Measles cases must either be placed in underground isolation hospitals or evacuated to safe areas.

The Minister of Health closed his survey on health problems by saying that there seems a fair chance that the most potent threat in this war will not be from the bomb and parachute but from the bug and the parasite. He has distributed a booklet to shelter wardens on simple measures in dealing with the louse, the flea and the bed-bug. Doctors have the power to examine any person in a shelter who is thought to be suffering from an infectious disease or to be verminous and to require isolation, removal to a hospital or cleansing. A very real danger lies in diseases borne by lice, as every doctor knows.

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The British campaign in Africa may be plagued by still another disease. More than 800 cases of Yellow Fever have been reported in a Province close to where British troops have been fighting. Africa is called the original home of yellow fever, by some, and certainly for years the west coast of Africa was considered one of the few remaining strongholds of the disease throughout the world. If yellow fever and the mosquitoes that carry it are lurking in the regions through which troops must travel and fight, the outcome of the campaign may well depend more on medical scientists than on military strategists. The bright spot in the picture, regardless of war, is the existence of the vaccine. It has been used to protect more than 1,000,000 people in Brazil and the Rockefeller Foundation, in whose laboratories it was developed, and other laboratories in this country have been collaborating on large scale production of it so as to have available a sufficient supply for vaccination of America troops in case they should have to be sent to Central or South America on hemisphere defense.

While no information is available, it is logical to suppose that nations sending troops to Africa would try to obtain some of this vaccine or develop a similar one.

According to an exiled German Physician, Dr. Curt Wachtel, there is a possibility that the Nazis may use bombs bearing disease germs in their attack on England. When he was in charge of the scientific section of the Kaiser Wilhelm Institute in Berlin, they were studying and testing the theory of air bombardment with disease germs and poisonous gases. Cholera, dysentery and anthrax can be spread by such means, he said.

During the daily indiscriminate bombing of England 50% of the hospitals have been damaged, some repeatedly. Hospitals have a plan of action to follow in case of an air raid. At the first approach of any enemy plane a warning signal is given, then when the planes get close a yellow light warns each man to go to his station. In hospitals where there are no underground rooms patients are wheeled in their beds to the corridors and there placed under their beds with the mattress on top of them. Some patients have to remain in bed, of course. It is pitiful for fracture cases to have to remain suspended from their frames throughout

a raid. Doctors and nurses stand ready to evacuate the entire hospital, if necessary. Certain men are detailed to throw buckets of sand on blazes started by incendiary bombs. Emergency ambulances stand ready to bring the wounded to hospitals but often doctors are forced to dress wounds on the street in the midst of falling bombs, broken glass and splinters. There is a special bomb disposal squad to remove delayed action bombs, many of which have been dropped on hospitals. The resident staff of one hospital has presented a stethoscope to the captain of one of these squads. He had frequently borrowed a stethoscope from the hospital in order to listen to the ticking of a delayed action bomb before removing it.

The London Hospital, the largest in the metropolis, has been hit 21 times, by incendiary, high explosive and small caliber bombs. Ten thousand panes of glass have been broken. Nevertheless, three hundred beds, about a third of the normal number, are in use. There is also, a large first aid post. The work of the hospital is conducted on the first, ground and lower floors with the wards and administrative offices bricked up. The medical college connected with it and the nurses home have been badly damaged.

In another case, a high explosive bomb went straight through the glass dome of a hospital, crashed through a five story staircase and landed on the ground floor. The desk in front of one Doctor disappeared and he was left perched on his chair against the wall with a 50 foot chasm in front of him. Firemen rescued him. When nurses opened the doors of various wards they

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JEFFERSON COUNTY MEDICAL SOCIETY

found a yawning hole in front of them. The staff got 100 patients to the ground by emergency methods. Some were slid down a wooden ramp which had been put up only a day before, others were carried down fire escapes. Two more bombs fell while they were working.

Many precautions have been taken to lessen casualties. As many chronically sick cases have been evacuated from London as would go. Most ordinary operations are performed out of London leaving city hospitals for emergency treatment and operations. Bomb wounds are usually small on the surface but have extensive damage underneath so that it is useless to dress the surface without doing a major cutting job on the inside.

The glass in operating rooms is either removed or covered with wire netting, screening, linen cloth or building paper. Window openings are sometimes bricked up or barricaded and any roof-light opening is covered by concrete slabs, sandbags or timber. When this is done the operating light is the only glass and fracture from glass is not likely. At the Westminster Hospital, which specializes in radium treatment, the radium is lowered into a 50 foot well at the first raid alarm and remains there until the "all clear" signal is sounded.

There is a scarcity of trained nurses in hos-

pitals and the majority of the nursing is done by young probationers under the age of 18. At the beginning of the war 150,000 beds were prepared but the attacks by the air have been so different from what was expected that most of these beds are still empty.

It is good to learn that those cases which require special attention are getting it. For instance, diabetic patients are allowed extra rations of meat and butter every week and other cases requiring more sugar than well people are allowed to receive it. Persons blinded by injuries are given special care in an effort to rehabilitate them and plans are being worked out to teach them new occupations. A great deal of deafness is being caused by the terrific noise of high explosive bombs and anti-air craft guns. Civilians are urged to use absorbent cotton ear plugs, soaked in vaseline, and to hold a rubber wedge between the teeth, as simple home-made protective devices.

There is a restriction of drugs caused by the government policy not to use their ships or foreign currency to import drugs which are not essential or for which substitutes can be found at home. A long list of drugs which have to be imported and substitutes which can be used for them has been sent to each Physician. By the way, Sulfanilamide is being used extensively for wounds during this war. Dermatologists are especially urged to use non-fatty ointments. It is hoped that there will be a great reduction in the amount of borac acid, iodine and mercury used so that these products may be made into war material.

British housewives have been given a list of things to save. Bones provide glycerine, not for medicine but for explosives, table scraps are made into animal feed and old metal and paper are used in the manufacture of war material. These are called "doorstep ammunition" and are collected regularly.

A need to economize on paper has reduced the thickness of medical journals but has not reduced the number, to any extent. Physicians are still writing scientific articles and medical

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journals appear regularly. The British Medical Journal did not allow the war to interfere with the celebration of its 100th anniversary.

The first medical mission to Great Britain was led by a famous United States Surgeon last August. One of the greatest Orthopedists in this country, Dr. Philip D. Wilson, who was the Doctor in charge of all amputations in the U. S. Army during the last war, cabled an offer of his services to England last May. The reply came back, "Our greatest need is for Orthopedic Surgeons" so Dr. Wilson, who is head of New York's famous Hospital for the Crippled and Ruptured, promptly began canvassing his wealthy patients for funds and his associates for volunteers and in August started for Britain with twelve volunteer Physicians and nurses. A second unit has now arrived.

The Greater New York Hospital Association has announced that its 102 units will collect surgical and medical supplies, funds and clothing to aid British Hospitals. These will include medical samples received by hospital staff members, collection of all discarded but serviceable surgical equipment, the raising of funds through benefit parties and knitting by nurses and other women employees.

This work has grown to national proportions. One Connecticut hospital has given an X-ray outfit. Physicians and surgeons in 65 cities are collecting surgical instruments. Kentucky Physicians are enlisted in this project.

The American Pharmaceutical Association recently conducted a campaign to collect drugs and medical preparations. Donations included 1,000,000 aspirin tablets from one manufacturer, 7,500 tablets of sulfanilamide from another, vitamin preparations and supplies, such as gauze, adhesive tape, hypodermic needles, cotton, rubber gloves and antiseptics. The American Dental Profession has presented a dental ambulance which is equipped as an emergency operating room where injuries to the face and jaws can be given immediate attention. It will be manned by a Plastic Surgeon, a Dental Surgeon, a Dental Mechanic and an Anesthetist, thus providing specialists to treat, on the spot, some disfigured civilian or soldier unfit to be moved.

All of you are acquainted with the part the Red Cross is playing in "Aid to Britain." There

are two services along medical lines that you may not know about. The New York chapter recruited 17,000 donors to give blood to Great Britain. However, now the British authorities have set up a project in England capable of meeting their own transfusion needs. So the American Red Cross is establishing a national blood reservoir to be placed at the disposal of the U. S. Army and Navy.

The American Red Cross—Harvard Hospital and the Harvard Public Health Unit will cooperate in the study and treatment of communicable diseases under wartime conditions. They have constructed, in this country, a 126-bed "Siege" Hospital and have sent it to an unnamed site in southwest England. It is constructed of prefabricated sections of 5-ply building board sandwiched between fire-resistant sheets. These will be bolted in a structural steel frame-work and camouflaged to match the surrounding country. The hospital consists of 22 buildings of a design developed for modern warfare. At the end of each building there will be a vestibule arrangement to allow doctors and nurses to enter and leave without light escaping. Windows will consist of three parts: heavy-duty plate glass reenforced with wire mesh, screen and blackout shutters. Ventilation experts have devised a system to circulate fresh air into the rooms during the nightly "lock-up" for blackouts. Air raid shelters, dug deep into the chalk strata at the site, will be an added safety feature. The entire hospital has been designed to minimize dangers of flying glass and other aid raid hazards.

The combined undertaking, comprised of 75 American Doctors, Red Cross nurses and laboratory technicians, is scheduled to begin operations as soon as the hospital is set up. It was shipped in February. The unit will make an extensive laboratory and field study of infectious diseases and report their findings to the U. S. Army, Navy and Public Health Service.

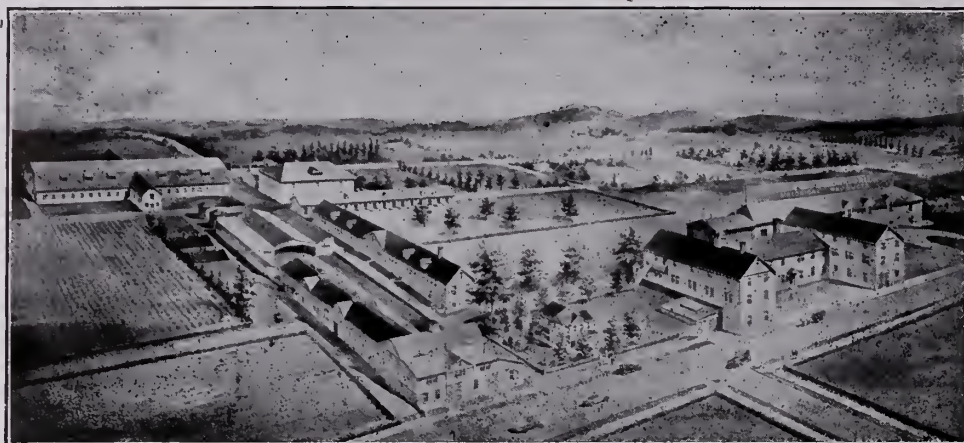
In conclusion, let me quote from the issue of the British Medical Journal celebrating its 100th anniversary. The editorial reads, "Britain is an embattled country subject to perpetual air alarms and threatened with invasion and the treatment of civilian air casualties is a matter of daily concern to Doctors throughout the land. The future is obscure; but British hearts are stout."

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# KENTUCKY MEDICAL JOURNAL—PART II

## WOMAN'S AUXILIARY SECTION

THE N. Y. ACADEMY  
OF MEDICINE

NOV 25 1941

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### EL CRISTO DE LOS ANDES

*"Sooner shall these mountains crumble into dust than the Argentines and Chileans break the peace sworn at the feet of Christ The Redeemer."*

Dedicated, March 13, 1904, to eternal peace between Argentine and Chile, this bronze statue—The Christ of the Andes—is located on the boundary, in Uspallata Pass, 14,000 feet above sea level. The funds to erect this monument were secured through the efforts of Senora Angela De Oleveira Cesar De Costa, President of the Christian Mothers of Buenos Aires.

## Achievement Project—County Auxiliary Development

Mrs. John Glover South, Frankfort, President

Beginning October, 1941—Ending At Annual Meeting, 1942

There will be included in the Achievement Project this year three new lines of study and work; the study of legislative procedure; the study of nutrition; and the study of Pan Americanism. These three subjects are strongly endorsed by the Woman's Auxiliary to the American Medical Association. Programs for these subjects will be sent County Presidents upon their request after November first.

Each County should keep a record of every item of achievement and send monthly report to State Program Chairman, Mrs. R. T. Layman, Elizabethtown.

Award—Blue Ribbon.

Judging Standards—All ratings based on Membership percentage at beginning of Year.

To win, small organizations have as good chance as large organizations.

List of Credits for Award to County Auxiliary for Outstanding Achievement:

	Point
1. Two programs devoted to study of legislative procedure .....	25
2. Two programs devoted to study of nutrition .....	50
3. Two programs devoted to Pan-Americanism .....	15
4. State and National Dues paid by 31st of March, 1941 .....	2½
5. Advisory Council from local Medical Society .....	2½
6. All Communications pertaining to Auxiliary Work answered immediately .....	2½
7. Names of newly elected Officers and Committee Chairman sent immediately to State President and to Editor of the Quarterly .....	2½
8. Report of Year's work sent to State President by August 1st .....	2½
9. Delegate Representation and Report of Year's Work presented at Annual Meeting .....	2½
10. Program Plans for Year's Work made in advance, when New Officers are elected, and copies sent to State President and State Program Chairman .....	5
11. One or more Health Education Programs during the year, open to the public or to representatives of lay organizations .....	10
12. Provide Speakers on Health Subjects for lay organizations. (Parent-Teacher, Church Groups, Women's Clubs, etc.) .....	10
13. Cold Abatement Campaign, program—each meeting program .....	5
Each Member wearing mask while afflicted with cold .....	1
14. Active participation in some project for community betterment such as assisting Women's Field Army for Cancer Control .....	10
15. Increase in Hygeia subscriptions, based on membership at the beginning of year .....	5
16. Gift of Hygeia Subscriptions to Local Libraries and Schools .....	5
17. Full Staff of Active Chairmen—or as many as Membership of County Auxiliary allows—to correspond with State and National Auxiliary...	5
18. Increase in Membership (percentage basis) .....	5
19. Observance of Doctor's Day for date designated .....	10
20. Doctor's Shop Donation—for each item .....	2½-10
21. Jane Todd Crawford Day Observance, December 13th .....	10
22. Jane Todd Crawford Memorial Fund, for each \$1 paid to State Treasurer .....	1
23. Jane Todd Crawford Trail planting donations; for each lot .....	2½-10
24. Cooperation in financial support of Quarterly and contributions published in the Quarterly (sent to Editor by 1st month—March, June, September, December).....	2½
News items not less than 20 during the year.....	2½
Poem—Original .....	2½
Picture—with cut or money to pay for cut .....	2½
Story .....	2
Feature—New or on any regularly carried subject. (Tuberculosis, Cancer Control, Child Health, etc.) .....	2½
Advertising contracts secured for each dollar .....	2½
25. Exhibit of Year Book and History of County Auxiliary at State Annual Meeting .....	2½
26. Historical Collection: Items, clippings, pictures, Biographical Sketches for Medical History, etc., sent to Mrs. J. R. Shacklette, Jeffersontown .....	2½
25. Each Member attending State Annual Meeting .....	5



# KENTUCKY MEDICAL JOURNAL—PART II

## WOMAN'S AUXILIARY SECTION

Published Quarterly Under the Supervision of the Advisory Council: Bowling Green, Kentucky

Vol. X, No. 4

October, November, December, 1941

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Business Mgr., Mrs. Wm. H. Emrich, Louisville  
Advertising Mgr., Mrs. J. E. Wier, Louisville

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### JANE TODD CRAWFORD DAY

Observance of Jane Todd Crawford Day, December 13, is increasing. What will your Auxiliary do as an observance this year? Have you interested your club in Jane Todd Crawford Day Observance? Write Mrs. Luther Bach, 325 Taylor Avenue, for her new booklet telling the story of Our Pioneer Heroine of Surgery.

### PRESIDENT'S MESSAGE

My dear Auxiliary Members:

The State Meeting is ended. And I have assumed the Presidency of your organization not without a feeling of trepidation, for I fully realize my responsibility, as well as my limitations. I intend to put into this year's work, as your President, the best that is in me of energy, brain, heart and soul. All this will avail nothing unless each of you do the same. I know that you will, and I am confident that we together, as aids, known as The Auxiliary, will make a contribution of real value to the State Medical Association in its effort to bring about better health and finer citizenship in Kentucky.

There is one thing that I ask of each Auxiliary member. That is—put your Auxiliary work before every other activity except your church responsibilities. You know the profession of highest rank in our citizenship is the clergy, the men of God, who minister to the needs of the human soul. The next profession of dignity, science, honor and charity is the medical profession which ministers to human suffering, alleviates pain, and builds strong bodies and fine minds that our people may be happy, useful citizens. Being the Auxiliary to this great profession is both an honor and a responsibility. Comparatively speaking, few women are eligible. Therefore, we must make the work of this organization our main objective, co-operating always to the best of our ability with other organizations, but never allowing our Auxiliary responsibility to become secondary. Let us remember the many women who are eligible to work in other societies and organizations, and the few who are eligible to meet the requirements of our group. The medical profession has entrusted to us, its Auxiliary, a great responsibility. Let us meet it magnificently.

In spreading knowledge of health laws, in teaching better sanitation and living conditions, in helping educate our people to the value of nutritive foods, we are doing the most constructive type of war work, for upon national health we must depend for our nation's preservation in peace or war.

THE ACHIEVEMENT PROJECT — COUNTY AUXILIARY DEVELOPMENT will again list our aims.

I shall recommend some changes, and the inclusion in that project of the three main suggestions of the Woman's Auxiliary to the American Medical Association, namely, the proposed

(Continued on page 105)

# -:- EDITORIALS -:-

## "AND I, IF I BE LIFTED UP—"

Argentine and Chile are now "Good Neighbors" although they used to be at war almost continually. Peace has reigned and both countries have prospered during the last 37 years. The people of both countries love and revere the constant reminder of the Prince Of Peace, The Christ Of The Andes, which stands on the crest of the mountains between them. Travelers come from all over the world to see this amazing and impressive monument, dedicated March 13, 1904, to glorify peace, justice and human brotherhood. The sculptor was Mateo Alonso, of Argentine. Molten cannon, much of it left by the early Spaniards, is the substance.

The story behind this monument is interesting.

Pope Leo XII sent an encyclical, dated November 1, 1900, to all the Bishops, calling for the consecration of the entire world to Christ The Redeemer. In that encyclical we find: "Venerable brethren—think it the chief part of your duty to engrave in the hearts of your people the true knowledge and we might almost say the image of Jesus Christ.—Remember the words He spoke: "And I, if I be lifted up from the earth, will draw all men unto Me.'" John XII-32.

Later, Bishop Benavente, Diocese of San Juan, Argentine, proposed in a pastoral letter, the erection of a statue, somewhere in the mountainous regions of his See, that would remind men that they, having been dedicated to the service of the Master, should adjust their political differences and arrive at a mutual understanding and live in peace and harmony. But, boundary disputes waxed hot. War seemed inevitable. Many factions advocated war. On the other hand, the Bishops made fervid appeals to both Governments to avert war: and, it is said that the women pleaded with their husbands not to join the army but to compel the rulers to submit the question of the boundary to arbitration. And, arbitration was finally tried with Edward VII of England rendering the decision. Both Governments accepted his decision.

That this most critical period in the history of the two Nations was passed without war, is credited to the calm resourcefulness and level-headedness of General Julio Roca, President.

Senora Angelo De Oleveira Cesar De Costa, President of the Christian Mothers in Buenos Aires, felt that the conclusion of these treaties should be commemorated in tangible form. She consulted with Bishop Benavente and she agreed

to undertake the work of securing the necessary funds and of having the statue created.

She suggested to President Roca of Argentine and members of the Chilean Commission that this bronze statue, measuring 26 feet in height, standing on a pedestal rough hewn from natural rock, be placed somewhere on the common boundary line as a perpetual reminder of the peace so auspiciously established between the two countries. Eventually, after no little difficulty, she was able to persuade those in authority and the site chosen, Uspallata Pass, the most practicable pass between Argentine and Chile, and where the victorious soldiers of San Martin first viewed the country of Chile which they were on their way to aid in achieving independence. Here, the poor sheep herders with their flocks were wont to cross the Andes. And here, now, pilgrims look down 3000 feet upon the tunnels through which thunder the locomotives and trains of the Trans-Andine line on their way between the cities of Valparaisa or Santiago and Buenos Aires.

At the dedication ceremony, Bishop San Carlos De Ancud of Chile, made an address, one sentence of which left a memorable impression, "Sooner shall these mountains crumble into dust than the Argentines and Chileans break the peace sworn at the feet of Christ The Redeemer."

At the First Regional Ibero-American Conference of Rotary International, held in Valparaisa, March 1936, a resolution was adopted that a bronze tablet bearing these noble words be placed on the monument in the name of the Conference and there the traveler of today will read them.

Senora De Costa writes in The Independent, Magazine, New York, October 5, 1905; "The penetrating idea of the commemorative monument was in the national atmosphere and I had but to condense it in my spirit to give it tangible form. If the idea is mine, it is in the same way as belongs to the sculptor the statue, which he brings forth from the block of marble where it was sleeping invisible; and I even dare to think that the idea had to issue from the brain of a woman, because it is an idea of sentiment, and in all time men have reproached us for thinking with the heart."

## LET'S GO TO THE SOUTHERN

The Eighteenth Annual Meeting of the Southern Medical Association and Woman's Auxiliary will be held in St. Louis, November 10-13, 1941. An excellent program has been arranged for everybody. So—let's go! Auxiliary headquarters are at Jefferson Hotel.



**STUDY CLASS**

Study classes interested in learning more about our Latin-American countries will be glad to know that "Good Neighbor" tour programs may be secured from the Pan American Union, Washington, D. C. Just write and ask for details.

Study of the Spanish language was recommended at the AMA Conference in Cleveland, last June.

**PRESIDENT'S MESSAGE**

(Continued from page 103)

study of legislative procedure, the study of nutrition, and Pan-Americanism. Our Achievement Project appears in this issue of the Quarterly, page 102.

We also must continue to strive for the organization of more Auxiliary units. We must have a large membership if we are to be effective. This is a day of organization. Those businesses, professional or political parties lacking organization will sooner or later be submerged by their particular enemies or competitors. The medical profession, because of its high ethics and its exacting duties in its fight against disease, has never had the time to perfect the organization it should have for its own protection. We must see to it that the women eligible to the Medical Auxiliary are found and knit together into a powerful, well trained group prepared to act intelligently and promptly whenever the State Medical Association may call.

So there is a great work ahead of us. We must not despair if we cannot accomplish it all, but rejoice over the part we do well.

This message brings my warmest personal greetings to each and every member, and the hope that I may meet and know each of you well before my year's work is finished. Write me if I can help you. Let me hear from you and know what your Auxiliaries are doing. If I hear nothing I cannot be blamed if I become discouraged and feel that you are inactive or becalmed, in which case I shall feel as did the old down East sea captain who, when asked what was the most harrowing experience in all his years on the ocean in all kinds of weather, replied: "Wal, I've been through typhoons, hurricanes, nor'easters an all, but Heaven preserve me from being becalmed. Ye jist can't steer a boat that ain't going nowhere." So please let me hear from you. Know always that your letters, cards or reports will bring me the greatest pleasure, and that I will recognize them for what they will be, an evidence of real interest in the great work which is our joint responsibility.

Sincerely yours,

(Mrs. J. G.) CHRISTINE BRADLEY SOUTH

**PAST PRESIDENT'S MESSAGE**

Mrs. John M. Blades, Butler

To me it has been a delightful privilege to work with you and with our President-Elect, Mrs. Christine Bradley South, during the past year. I am sure that the new Auxiliary year will prove an eventful one in Auxiliary history. Let's all do our best to help Mrs. South make it so. We are indeed fortunate and honored to have a person of such wide and varied experience for our President. I am sure that she can lead us into new channels that will mean much to Auxiliary work.

I thank you again for your splendid co-operation during the past year. I thank especially the County Auxiliary Presidents and Committee Chairmen for the many reports of the year. You have been most kind and very prompt. I shall always cherish the memories of a happy year rich with your friendships as I tried to serve as your President. I take my place now with the Past Presidents with much love for you and highest hopes for the future of the Auxiliary to the Kentucky State Medical Association.

**OUR BUSINESS**

Mrs. Wm. H. Emrich Louisville

The shop windows are filled with so many beautiful things, despite the terrible conflict enveloping a vast part of the world. Our own American artists and craftsmen are working harder than ever designing and producing better things for use in our everyday life.

Summer is slowly departing; the rich deep colorings of red and gold are still hidden in our hills and countryside awaiting Nature's beckoning nod. One single sharp cool day may summon their appearance and give us mortals a new enthusiasm for buying new things to wear, new things to live and work with. Some may have their needs listed, hoping to avoid the rush which makes late shopping so laborious and often fruitless. We hope you have remembered our Advertisers who are fully prepared to supply many of these needs.

A visit to their shops will convince you of their willingness to serve you. It may be more convenient to telephone for some service or merchandise. In any event, kindly say, "I read your Advertisement in the Woman's Auxiliary Supplement to the Kentucky Medical Journal." This little favor on your part may help to procure more contracts.

In this issue of the Quarterly on pages 124 the audited report of the finances for the year 1940-41 is printed in detail.

When you buy and use Tuberculosis Christmas Seals you become a partner in a great life-saving campaign.

## A SALUTE TO THE QUARTERLY

Mrs. George A. Hendon, Louisville

"Tall oaks from little acorns grow," and the same adage is true in connection with our Quarterly—The Woman's Auxiliary Section of the Kentucky Medical Journal.

In September 1931, following the State Meeting held in Lexington, the Auxiliary was requested by the House of Delegates of the Kentucky State Medical Association, to issue a quarterly publication conveying news and information relative to Auxiliary work.

This was a right large order, but one we felt sure we could try to fill although we were inexperienced along that line. In the first place the Quarterly had to be financed by the sale of advertising space. This was done by a few—very few volunteer salesmen, really but eight Louisville Members of the Auxiliary going forth to sell space in the new venture, with most of the copies of the publication circulating out in the State. But, this labor of love was accomplished. We contracted for One Thousand Fifty Three Dollars and Eighty Seven cents (\$1053.87) worth of advertising between October 3 and December 1, 1931, the black year of Depression. We were justly proud of our first issue which came out in January 1932, the cover carrying a Kentucky Cardinal calling "Good Cheer — Good Cheer." From that time we have published the Quarterly regularly, with no interruption and but one delay—that of the Flood issue which came out in May instead of April in 1937.

It is a pleasure to note the progress we have made. The Advisory Council, in 1931, suggested that we have a publication of 24 pages: 16 pages of reading matter and 8 pages of advertisements. The combined Quarterlies for 1932 covered 136 pages; and for 1940 there were 140 pages. Only once, 1938, were our pages as few as 124: in 1937, 152 pages.

Quite a few Auxiliary Members have had their four Quarterlies put in an attractive binding each year, and I assure you it is a very great pleasure to look over our back numbers and see what we have accomplished.

As the first Quarterly was issued during my administration as President of the Woman's Auxiliary to the Kentucky State Medical Association, I consider it an honor and a privilege to think of myself as the mother of this lusty child—The Quarterly.

---

It was in a baby school in London, the type set-up since the war, that a six-year old ended his prayer with—"And God, please take good care of yourself. If you were sunk, whatever should we be?"

## GYM SUIT OF YESTERYEAR

Mrs. A. T. McCormack, Louisville,

Woman's dress in this year of 1941 is quite different from the prevailing mode of our grandmother's day.

Pictures of fashionable costumes which we find in Godey's Ladies' Book, or even in the Ladies Home Journal, fill us with wonderment at the many frills, tucks, flounces and furbelows and the yards and yards of material required for even the simplest costume. The comfortable sports suits, the shorts and halters evident everywhere this past summer, as well as the abbreviated bathing suits on the beaches, would have filled our grandmothers with dismay and sent them running to cover with their blushes flaming indignation. Yet, who of us wish to go back to the sweeping trains of afternoon attire or the long, hampering skirts worn during their mornings?

Last August, in a New England attic, the following receipt was found from what is now known as Plymouth Normal School:

"State Normal School Plymouth, New Hampshire, March 17, 1871, Received of Marietta Rodgers, Five Dollars, Tuition for Spring Term, A. C. Hardy, Treasurer."

Along with this receipt, the following directions were found for, perhaps, one of the first gym suits for a girl at a school in this country:

"Directions for Gymnastic Dress For New Hampshire State Normal School:

**WAIST**—Cut like the Garibaldi Waist, only very SHORT on the shoulder so as to allow the arm to be raised straight above the head, without lifting the belt. Belt loose and sleeves long. Plain coat sleeve is desirable.

**SKIRT**—May be gored or plain, and must extend nearly a quarter of a yard below the knee.

**PANTS**—Must be cut long enough to reach to the top of the boots. Finish by running in an elastic cord an inch from the bottom which will aid in keeping them in place a little above the top of the boot.

**MATERIAL**—May be Ladies Cloth, Waterproof, or Alpaca. If of the latter, a lining throughout is required. Color of Material, black. Number of yards required for a plain dress without trimmings or over-skirt; 9 yards single width, or 4½ yards double width, whether trimmed or not, and if trimmed, what way is entirely optional.

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"M. F.: A very high polish to the nails has never been considered good form. American women hope to attract more by the brilliancy of their brain than the brilliancy of their nails."

—From Questions and Answers in the Ladies Home Journal, 50 years ago.



**HYGEIA CONTEST****For 1941-1942 Hygeia Subscriptions****Mrs. J. W. Sams, Louisville Chairman**

The sum of \$400.00 will be given by HYGEIA in cash prizes to the Auxiliaries securing the largest number of subscription credits to HYGEIA during the contest beginning September 1, 1941 and ending January 31, 1942.

The \$400.00 will be divided into cash prizes for each of four groups as follows:

1st prize \$40.00, 2nd prize \$25.00, 3rd prize \$15.00.

**County Prizes**

- Group 1. 100 Auxiliaries with a membership of 1 to 13:
- Group 2. 100 Auxiliaries with a membership of 14 to 23:
- Group 3. 100 Auxiliaries with a membership of 24 to 42:
- Group 4. 100 Auxiliaries with a membership of over 43.

**State Auxiliary Prizes**

Three cash prizes will be given to State Auxiliaries who have obtained the greatest number of subscription credits over their quota:

1st prize \$40.00, 2nd prize \$25.00, 3rd prize \$15.00

**Contest Rules**

PRIZES ARE BASED ON your group quota and the number of subscription credits obtained. Your quota is the number of paid-up members in your auxiliary at the close of our fiscal year for 1940-41. This arrangement gives the auxiliary with a small membership an equal chance with the larger ones in their particular group. For example: An Auxiliary that has twenty members and secures twenty subscriptions would have reached its quota and have a rating of 100 per cent. Further, if an Auxiliary has only twenty members and secures eighty subscriptions it would have a rating of 400 per cent, and win over an Auxiliary that has thirty members and secures ninety subscriptions with a rating of 300 per cent.

NEW OR RENEWALS on a one-year subscription will count as one credit; a two-year subscription as two credits; a three-year subscription as three credits; a six month subscription as one-half credit. In the event of a tie, the county sending the largest number of two-year and three-year subscriptions will be awarded the prize. Unpaid subscriptions will not be counted in the contest, unless payment is received before the close of the contest.

RESTRICTIONS: No County will be given a cash prize unless its Auxiliary has secured at least twenty-five subscription credits. No Coun-

ty or State will be given a cash prize unless it has reached its quota:

TIME LIMIT: The time of the contest covers the period from September 1, 1941 to January 31, 1942. All orders in envelopes post-marked on and previous to January 31, 1942, will be counted in the contest. Mail in Contest orders to HYGEIA Department, 535 North Dearborn Street, Chicago, Illinois, on the order blanks. Send original white copy to us and keep the pink carbon for your records. Please write or print plainly.

**Hygeia Rates**

	Rate	Comm.	Remit to Hygeia
One-year subscription	\$2.50	\$1.25	\$1.25
Two-year subscription	4.00	1.50	2.50
Three-year subscription	6.00	2.25	3.75

**Special Group Subscription Rate For Hygeia To Schools**

(12 months)

		Comm.
3 to 9 subscription	2.25 each	\$1.00 each
10 to 24 "	2.10 "	.85 "
25 to 49 "	1.90 "	.65 "
50 or more "	1.75 "	.50 "

100 or more write to Circulation Manager (9 months)

1 subscription	..\$1.88 each	\$ .94 "
3 to 9 "	1.71 "	.775 "
10 to 24 "	1.57 "	.64 "
25 to 49 "	1.44 "	.50 "
50 or more "	1.35 "	.415 "

(6 months)

1 subscription	..\$1.25 each	\$ .625 "
3 to 9 "	1.14 "	.50 "
10 to 24 "	1.05 "	.425 "
25 to 49 "	.96 "	.325 "
50 or more "	.90 "	.25 "

THESE RATES are applicable only when a number of subscriptions are financed by one person. They do not apply where a single subscription is placed by one individual.

**Special Rate For Doctors Only During The Month Of December**

During the month of December, you may accept subscriptions from Members and Fellows of the American Medical Association, the physician's own subscription and gifts he may choose to make at the half-rate, \$1.25. No commission can be allowed on these orders, but credit will be given to your Auxiliary.

NOTE! Should any of your Auxiliary members call on a physician who has entered a subscription, report the date payment was made to this office and credit will be given your auxiliary, providing the order is received within thirty days. Please make sure that an order has been entered before sending the name to this office.

**Special Christmas Rates Effective December 1, 1941**

To dentists, nurses, the public and other groups the following rates should be quoted.

	Price of Sub.	Your Comm.	Amt. You remit to A.M.A.	Credit Allowed
1 gift sub.	\$2.50	\$1.25	\$1.25	1c.
2 gift sub.	4.00	1.50	2.50	2c.
Each additional gift sub.	2.00	.75	1.25	1c.



# Tuberculosis



Mrs. Lucius Ernest Smith, Louisville, State Chairman.

## CHRISTMAS SEALS



### *Protect Your Home from Tuberculosis*

#### LIGHTING THE WAY

Thoreau tells us to "build castles in the air," but, he adds, "you must then place foundations under them." This is pretty sane advice to follow. Castles without foundations always fall.

Our Seal Sale Service has built a castle for us, our 1941 goal. It is up to us to put the foundation under it. The artist has allowed his fancy to run in such a beautiful way that we find ourselves following him into the romantic world in which a lighthouse is the central figure. The lighthouse in the picture gives a feeling of security, because the purpose of a lighthouse is to warn vessels of hidden dangers, and guide them safely into port.

There is something romantic about all of this, but the lighthouse does not stand on the air—it must be built on a foundation, it must be equipped along scientific lines, it must have a keeper who is faithful and he must have all the needed material to keep his light in operation, regardless of the storms that beat around it.

As we look at the picture before us, we see the light in the home shining out from the windows, indicating warmth and protection and suggesting health and happiness within. There are tracks in the deep snow which indicate that someone has just dropped in to see if all is well.

Tuberculosis has been taking human lives for generations in this wonderful land of ours. In

many places the warning light has not been shining very brightly. In other places the light has gone out, and, strange as it may seem, there are localities where the warning light has never been lighted. So, to go back to the figure of our lighthouse, the perfection, which might well have been obtained, has been a fanciful dream of a castle in the air. We must awaken from our dreaming. We must find a way to use the knowledge we have concerning tuberculosis where it will reach all, in every nook and cranny, in order that all may know that tuberculosis is preventable and curable. We must show them how to find and cure tuberculosis, in order that its ravages may be reduced to a minimum in as short a time as possible.

Defense needs demand an increase in our resources because the burden is greater in this time of mobilization, stress and anxiety. Therefore, we must be ready to render better service and to meet the needs of all groups in our communities, our State and our nation. As our field of service widens, our burdens increase correspondingly, and call for every ounce of our devotion and loyalty. New vigor and activity must be injected into our task.

Let's begin now to build a foundation for our castle in the air. It will take time, thought, work and inspiration to build a foundation that will stand under this 1941 Seal Sale Program; but if we build it right, that is, if we support this ideal in a loyal way, it will be well worthwhile. The knowledge we have about tuberculosis should be spread to all mankind, that they may know the facts about tuberculosis. This will inspire them to renewed activity in their own behalf and in behalf of others.

The National Tuberculosis Association has asked us to sell \$65,000 worth of Seals this year. We can do it if we will. Just think how much good that sum could do in the fight against tuberculosis.

There should be a Seal Sale Program carried on in every county in Kentucky. Find out who is in charge of this program in your own community. If you have trouble in getting this information, write to the Kentucky Tuberculosis Association or to your State Chairman. Then see what you can do to help push this program forward in the best possible way. It may be that in some counties, the Auxiliary can best help by conducting the Seal Sale, but the way is always open to push the work by hearty cooperation with whatever agency or whatever group



is acting officially for the Kentucky Tuberculosis Association. There is something each of us can do, and we should be willing and anxious to do it. Remember, we may work as individuals, or as a group. Don't wait! Begin to think about it now and let's join the Kentucky Tuberculosis Association in promoting the largest Seal Sale Kentucky has ever known.

Tuberculosis is our great enemy, and it ravages the home and fireside, and weakens the supply of man power upon which National Defense must depend.

## CANCER CONTROL

### CANCER IS CURABLE

**Mrs. Bernard Asman, Louisville, State Chairman**

After all we read and all we hear about that saying "Cancer is curable if caught in time," I am wondering what John Q. Public knows about Cancer.

I am going to take the liberty of reviewing a few lines from an article I read in a booklet gotten out by the Hospital Buyer Company, Inc., Chicago. It states that in spite of the thousands and thousands of dollars already spent to educate the public anent cancer and quackery, six persons out of ten are still unable to recognize the symptoms. This is a survey of American Institute of Public Opinion.

Only 56 persons out of ever 100 interviewed realized that the disease is curable if detected in time. However, only 49½ were of this opinion last year. So here is a cheerful note. And, there is also a decrease in the number who think it is "contagious, like a bad cold or influenza."

However, one thing generally agreed upon, is that cancer is the "most dreaded" of all diseases known to the public

Don't let us give up this fight. Keep up the educational program of the American Society for the Control of Cancer. And, maybe next year, there will be a greater percentage of those who have learned this great lesson. Possibly too, through your efforts a few lives may be saved.

The drive throughout the State was a greater success this year than last and with our unflagging efforts along this line we will finally win what seems a losing fight at present. Do your part, each and every member of the families of the medical profession, and you will in the end be a real good Samaritan.

Knoweldge about Tuberculosis means power to conquer the disease

The spread of this knowledge is made possible by the sale of Christmas Seals.

## PROCEEDINGS OF THE NINETEENTH ANNUAL MEETING OF THE WOMAN'S AUXILIARY

to the

**KENTUCKY STATE MEDICAL ASSOCIATION**

Held at

**Louisville, Kentucky, Sept. 29-Oct. 1, 1941**

The Nineteenth Annual Meeting of the Woman's Auxiliary to the Kentucky State Medical Association opened at 9:00 A. M., Monday, September 29, 1941 at the Brown Hotel, Louisville, Kentucky, with Registration.

### Quarterly Luncheon

The Third Quarterly Luncheon of the Woman's Auxiliary to the Kentucky State Medical Association was held in the Roof Garden, Brown Hotel, Louisville, at 12 M., with Mrs. A. T. McCormack, Editor of the Quarterly, presiding.

It was a Pan-American Luncheon with Latin American music and dances mingling with American patriotic songs and exhibit of flags and other displays from Central and South America. Guests of honor included: Mrs. John G. South, whose late husband was Minister Plenipotentiary and Envoy Extraordinary from the United States to the Republic of Panama; Senor Angel Perez, Consul for Cuba in Kentucky, and Senora Perez; Senor G. Gabriel Romo, Consul for Mexico in Louisville, and Senora Romo; Mrs. R. E. Mosiman, President, of the Woman's Auxiliary to the American Medical Association, who, fortunately for us, came early enough for this luncheon.

Our Stake in Latin America was the topic of an address by Mr. Tom Wallace, Editor of the Louisville Times.

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REFINERY IN LOUISVILLE, KY.

### Study Class

At 2:00 P. M., Monday, the Study Class was held in the Derby Room of the Brown Hotel with Mrs. S. C. McCoy, Louisville, presiding.

Revisions and suggestions for our new Handbook was the topic under discussion and many helpful ideas were received by the committee which included Mrs. A. T. McCormack, Mrs. S. C. McCoy and Miss Grace Stroud, Chairman. It was recommended that further discussion of the book be continued at the Post-Convention Board Meeting.

### Minutes Of The

#### Pre-Convention Board Meeting

The Annual Pre-Convention Board Meeting of the Woman's Auxiliary to the Kentucky State Medical Association was held in the Derby Room, Brown Hotel, Louisville, at 3:45 P. M., with the President, Mrs. John M. Blades, Butler, presiding. A quorum was present. (15 seated).

The Invocation was given by the President who read the Woman's Club Collect.

A motion carried that the reading of the Minutes of the Spring Board Meeting, held at Florence, April 25, 1941, be dispensed with as they had been published in the Quarterly.

Roll call answered by 7 Officers, 8 Committee Chairmen and 4 County Presidents.

## ICE CREAM

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Appraisals of Estates and Collections  
By Eleanor Hume Offutt

The President announced the appointment of the following committees:

General Chairman of Arrangements for the Annual Meeting, Mrs. Bernard Asman, Louisville, Jefferson County.

Publicity Chairman, Mrs. John E. Dawson, Fort Thomas, Campbell-Kenton County and Mrs. Louis J. Hackett, Louisville, Jefferson County.

Resolutions, Mrs. F. M. Travis, Frankfort, Franklin County, Chairman; Mrs. V. A. Stilley, Benton, Marshall County and Mrs. H. C. White, Covington, Campbell-Kenton County.

House, Mrs. Evan T. Garrett, Murray, Calloway County.

Exhibit, Mrs. Joseph Barr, Frankfort, Franklin County.

Printing, Mrs. Joseph E. Wier, Louisville, Jefferson County.

Program, Mrs. John G. South, Frankfort, Franklin County.

Nominating, Mrs. S. C. McCoy, Louisville, Jefferson County, Chairman; Mrs. R. T. Layman, Elizabethtown, Hardin County; Mrs. Robt. Sory, Richmond, Madison County; Mrs. James A. Outland, Murray, Calloway County and Mrs. Lawrence L. Washburn, Benton, Marshall County who was elected to fill a vacancy.

Mrs. John G. South announced that Mrs. Samuel H. Flowers, Middlesboro, Public Relations Chairman, was ill at the Norton Infirmary, Louisville, and moved that the Secretary write her a note expressing the regret of the organization at her illness and its wish for a speedy recovery. Motion seconded by Mrs. Joseph E. Wier and carried.

A motion that some provision be made so that the Organization Chairman have more material available for County Presidents was made by Mrs. Bernard Asman, seconded by Mrs. V. A. Stilley, Benton, and carried. Adjourned, 4:30 P. M.

GRACE STROUD,  
Recording Secretary.

### President's Report To Kentucky State Medical Association

The President, Mrs. John M. Blades, appeared before the House of Delegates in Annual Session at Louisville, September 29, at 8 P. M., and presented her Report of the work of the Auxiliary for the past year.



**Joint Session**

At 9 A. M., Tuesday, September 30, the Auxiliary met jointly with the Kentucky State Medical Association, at the Brown Hotel, for the Installation Ceremony of the President, Dr. E. L. Henderson, Louisville.

**Minutes of the Annual Meeting  
First Session**

The General Business Meeting of the Nineteenth Annual Meeting of the Woman's Auxiliary to the Kentucky State Medical Association was called to order in the Roof Garden, Brown Hotel, Louisville, at 9:45 A. M., Tuesday, September 30, by the President, Mrs. John M. Blades, Butler. A quorum was present. (38 members were seated at the opening of the session.)

The Invocation was offered by the Reverend Peter M. Pleune, Pastor, Highland Presbyterian Church.

Group singing was led by Mrs. Russell E. Kinsey, Williamstown, accompanied on the piano by Mrs. Frank Dougherty, Louisville.

Dr. Thomas J. Crice, Louisville, Chairman of the Advisory Council, Woman's Auxiliary to the Jefferson County Medical Society, welcomed the visitors on behalf of the Council.

Mrs. Bernard Asman, Louisville, President of the Woman's Auxiliary to the Jefferson County Medical Society, gave the address of Welcome to which Mrs. Evan T. Garrett, Murray, responded.

Roll call showed 8 Officers, 12 Committee Chairmen, 5 County Presidents and 20 Delegates present.

A motion carried that the reading of the Minutes of the Eighteenth Annual Meeting held in Lexington, September 17, 1940, be dispensed with as they had been published in the Quarterly.

With the First Vice-President, Mrs. John B. Floyd, Richmond, in the chair, the President gave her Report of the Year's work. It was accepted with a rising vote of thanks.

The Report of the Committee on Arrange-

ment was made by the Chairman, Mrs. Bernard Asman.

The Report of the Committee on Registration and Credentials was given by Mrs. Octavus Dulaney, Louisville, who, announced that 105 had registered.

Messages and Greetings from the Kentucky State Medical Association were brought by the Retiring President, Dr. W. E. Gary, Hopkinsville, and the newly installed President, Dr. E. L. Henderson, Louisville.

Messages from the Advisory Council were brought by Dr. A. T. McCormack, Louisville, and Dr. Virgil Kinnaird, Lancaster.

An In Memoriam Service for Mrs. Ella Dixon, Glasgow; Mrs. Philip F. Barbour, Louisville and Mrs. Harry Davidson, Louisville, was conducted by Mrs. C. C. Howard, Glasgow, assisted by Mrs. C. C. Turner, Glasgow, Mrs. George A. Hendon, Louisville and Mrs. Russell E. Kinsey, Williamstown.

**RECESS****Luncheon**

A luncheon, honoring Past Presidents of the Woman's Auxiliary to the Kentucky State Medical Association, was given at 12:30 P. M., Tuesday, at the Pendennis Club, Louisville, with the President, Mrs. John M. Blades, presiding. This luncheon was given the Auxiliary by the Jefferson County Medical Society.

The Invocation was offered by Mrs. J. R. Shacklette, Jeffersontown.

Nine Past Presidents were in attendance; Mrs. V. A. Stilley, Benton; Mrs. P. E. Blackerby, Louisville; Mrs. George A. Hendon, Louisville; Mrs. A. T. McCormack, Louisville; Mrs. B. K. Menefee, Covington; Mrs. J. I. Greenwell, New Haven; Mrs. Luther Bach, Bellevue; Mrs. S. C. McCoy, Louisville and Mrs. R. T. Layman, Elizabethtown.

Ballet Dancing by pupils of the Frances Barrett Dance Studio concluded the program.

**Drive and Tea**

A Sightseeing Drive was followed by a Tea at the home of Mrs. Joseph C. Dahlem on the Bardstown Road.

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**MAGNOLIA 0772**

## Second Session

The Second Session of the General Business Meeting of the Woman's Auxiliary to the Kentucky State Medical Association was held in the Roof Garden, Brown Hotel, Louisville, at 9:30 A. M., Wednesday, October 1, with the President, Mrs. John M. Blades, presiding. A quorum was present. (28 members were seated at the opening of the session.)

The Invocation was offered by Mrs. Luther Bach, Bellevue.

The Minutes of the previous session were read and approved.

Group singing was led by Mrs. Russell E. Kinsey, accompanied by Mrs. Frank Dougherty, Louisville.

Reports of the State Officers, Committee Chairmen and County Presidents were read as follows:

President-Elect—Mrs. John G. South, Frankfort.

A motion to accept the reports as a whole was made by Mrs. Bernard Asman, Louisville, seconded by Mrs. William H. Emrich, Louisville, and carried.

2nd Vice-President—Mrs. Russell E. Kinsey, Williamstown.



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A motion by Mrs. John G. South that members making reports use the microphone was seconded by Mrs. A. T. McCormack, Louisville. Carried.

3rd Vice-President—Mrs. Evan T. Garrett, Murray.

Treasurer—Mrs. Luther Bach. After hearing the report of the Treasurer, Mrs. A. T. McCormack moved that the present President appoint a committee to study Ways and Means to increase the funds in the Treasury. The motion was seconded by Mrs. Bernard Asman and carried. Mrs. George A. Hendon, Louisville, moved that the report of the Treasurer be adopted. Motion seconded by Mrs. R. T. Layman, Elizabethtown and carried.

Parliamentarian—Mrs. S. C. McCoy, Louisville.

#### Committee Chairmen:

Cancer Control—Mrs. Bernard Asman.

Dr. A. T. McCormack was presented and invited all Auxiliary members to attend the banquet on Wednesday evening and urged them to make reservations early.

Exhibit—Mrs. Joseph Barr, Frankfort. Mrs. B. K. Menefee reported that Franklin County had won the contest for the best exhibit at the Annual Meeting. Mrs. Barr accepted the Blue Ribbon for her County.

Dr. Misch Casper was presented and announced that the President of the Kentucky State Medical Association had asked him to urge the Auxiliary members to accompany their Doctors to the Annual Dinner.

Finance—Mrs. J. R. Shacklette, Jefferson-town.

Historian—Mrs. C. C. Turner, Glasgow, read the report of Mrs. C. C. Howard, Glasgow, Chairman.

Jane Todd Crawford Memorial—Mrs. A. T. McCormack.

Program—Mrs. R. T. Layman announced that Franklin County had won the contest for County Achievement. Mrs. F. M. Travis accepted the Blue Ribbon for her County.

Mrs. Russell E. Kinsey, Doctor's Day Chairman, announced that Mrs. M. C. Darnell, Frankfort, had won the contest for the best biography of a Pioneer Physician. Her biography will be published in the Quarterly. A biography by Mrs. Evan T. Garrett, Murray, placed second.

Radio—Mrs. Joseph E. Wier, Louisville. A Report of her Cold Abatement Campaign was given by Mrs. Wier while she was at the microphone.



**The Quarterly**

Editor—Mrs. A. T. McCormack.

Business Manager—Mrs. William H. Emrich.

Advertising Manager—Mrs. Joseph E. Wier.

The Report of the Delegate to the Annual Meeting of the Woman's Auxiliary to the American Medical Association held in Cleveland was read by Mrs. Joseph E. Wier.

With the 2nd Vice-President, Mrs. Russell E. Kinsey, in the chair, Mrs. John M. Blades gave her Report as Councilor to the Woman's Auxiliary to the Southern Medical Association held in Louisville in November.

Mrs. R. E. Mosiman, Seattle, Washington, President, Woman's Auxiliary, American Medical Association and Mrs. M. Pinson Neal, Columbia, Missouri, President, Woman's Auxiliary, Southern Medical Association arrived and were escorted to the platform and presented. Mrs. Mosiman called attention to an article in the Post-Convention issue of the Bulletin of the National Auxiliary on Practical Workings of Politics and suggested that every woman read it. Mrs. Neal invited the membership to attend the Annual Meeting of the Woman's Auxiliary to the Southern Medical Association in St. Louis in November.

The President appointed Mrs. Joseph E. Wier to take subscriptions to the A. M. A. Bulletin.

A Ways and Means Committee was appointed by the President as follows: Mrs. Bernard Asman, Chairman, Mrs. Evan T. Garrett and Mrs. Russell E. Kinsey.

**County Reports**

Calloway—Mrs. Evan T. Garrett.

Campbell-Kenton—Mrs. John E. Dawson gave the report in the absence of the President.

Franklin—Mrs. F. M. Travis gave the report in the absence of the President.

Graves—Mrs. N. M. Atkins, Mayfield.

Hardin—Mrs. R. T. Layman, Elizabethtown.

Jefferson—Mrs. Bernard Asman.

Licking Valley—Mrs. Luther Bach gave the report in the absence of the President.

The President announced that as the program was running behind schedule and the room must be vacated by 12 Noon the meeting would be recessed and continued after luncheon.

RECESS

**Annual Luncheon**

The Annual Luncheon, honoring the National and Southern Auxiliary Presidents, was held in the Bluegrass Room, Brown Hotel, at 1 P. M., Wednesday, with the President, Mrs. John M. Blades, presiding.

The Invocation was offered by Mrs. William Walker Ward, Frankfort.

Vocal solos were rendered by Dorothy Smith Gilsdorf, Louisville and Seattle, with Mrs. Truman Jones, accompanist.



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The President introduced the First Lady of Kentucky, Mrs. Keen Johnson, wife of the Governor of the Commonwealth, a member of Madison County Medical Auxiliary, who told of the many Physicians in her family and her interest in medical affairs.

Dr. Fred Rankin, Lexington, President-Elect of the American Medical Association, was presented.

Dr. W. E. Gary, Hopkinsville, Retiring President and Dr. E. L. Henderson, Louisville, Incoming President of the Kentucky State Medical Association, brought messages from the parent organization.

Dr. Virgil Kinnaird, Lancaster, brought greetings from the Advisory Council.

The principal addresses were given by Mrs. R. E. Mosiman, Seattle, President, Woman's Auxiliary, American Medical Association and Mrs. M. Pinson Neal, Columbia, Missouri, President, Woman's Auxiliary, Southern Medical Association.

**Minutes of the Annual Meeting**  
**Second Session Continued**

The General Business Meeting was continued in the Derby Room, Brown Hotel, at 3:15 P. M., with the President, Mrs. John M. Blades, presiding.

County Reports were continued as follows:

Marshall—Mrs. N. E. Green, Benton, read the report in the absence of the President.

Mercer—Mrs. A. T. McCormack read a letter she had received from the President of Mercer County reporting that their Auxiliary had disbanded. Mrs. McCormack moved that Mercer County be encouraged to reorganize so that the work of the Doctor's Shop might be continued with a chairman from that locality. Mrs. Luther Bach seconded the motion and it carried.

Rebecca Ruth Candy is the aristocrat of the Candies. It is made of the finest materials: sweet heavy cream, whole rich milk, (grade A) delicious fresh nut meats, highest quality vanilla, sugar, chocolate. It is home made and should be used at once. Mailed everywhere.

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A motion that all the reports be accepted and filed was made by Mrs. Bernard Asman, seconded by Mrs. Evan T. Garrett and carried.

The Report of the Committee on Resolutions was given by the Chairman, Mrs. F. M. Travis and was accepted, as follows:

WHEREAS, the Woman's Auxiliary to the Kentucky State Medical Association has lost a sincere friend in the passing of Dr. Austin Bell, whose counsel and advice have contributed so much to the success of the Auxiliary, and whose contribution to the work of the Kentucky State Medical Association, inspired the women to strive to be worthy of that confidence.

BE IT RESOLVED, that the Auxiliary, deeply conscious of the loss, pay a tribute of love and respect and offer to the bereaved family its sincere sympathy, and,

BE IT FURTHER RESOLVED, that the Corresponding Secretary be instructed to forward a copy of this resolution to the family of Dr. Bell.

WHEREAS, the Woman's Auxiliary to the American Medical Association has outlined a program stressing the study of Pan-Americanism, the nutritive value of foods and legislative procedure, and

WHEREAS, these three subjects are extremely important in this time of crisis when we as a nation are striving for closer unity between the Americas, for the building of healthier citizens through the use of proper foods and for the preservation of our Democratic institutions which are vitally affected by Legislation, therefore

BE IT RESOLVED, that the Woman's Auxili-

ary to the Kentucky State Medical Association incorporate these three subjects in its program for the year's work.

WHEREAS, the President of the Kentucky State Medical Association and the members of the Advisory Council have requested that the Woman's Auxiliary cooperate with them in working for the passage of the legislative program of the Kentucky State Medical Association and

WHEREAS, that program consists of the Food, Drug and Cosmetic Act, the Hospital Standardization Act (a bill especially for small hospitals) and the support of the Governor's program for the eleemosynary institutions and a bill asking for an appropriation for the extension and support of the local County Health Department,

BE IT RESOLVED, that the Auxiliary put forth every effort of which it is capable to secure the passage of their legislation at the coming session of the Legislature which will convene in Frankfort in January.

WHEREAS, the national defense program calls for the consideration and support of every physician and every Auxiliary member and defending America has reached an acute state in which it calls for the aid of every thinking doctor and every doctor's wife, and

WHEREAS, the Kentucky State Medical Association, true to its history and tradition, has proffered to the government all the services and facilities of the Association and its constituent Societies, and

WHEREAS, in the emergency program of arming the United States it is obvious that through the transfer of doctors to various places a situation is created whereby the Auxiliary may be helpful;

BE IT FURTHER RESOLVED, that we, the Woman's Auxiliary to the Kentucky State Medical Association, realizing that health is the basic line of national defense and national reconstruction when the war will have ended, pledge ourselves to put Auxiliary work before all other activities save Church work, and throw all of our strength into renewed efforts, for health education, health protection and health building.

WHEREAS, we have just completed a successful year's work and a splendid meeting, BE IT RESOLVED, that the Auxiliary thank our President, Mrs. Blades, the State Officers and Committee Chairmen for their faithful work and their fine leadership throughout the year.

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**Courtesy Resolutions**

WHEREAS, The House of Delegates, expressing the confidence of the Kentucky State Medical Association in its subsidiary organization, the Woman's Auxiliary, has again appropriated the sum of \$500 to be used, should occasion arise, as a contingent fund for the support of the Woman's Auxiliary Supplement to the Kentucky Medical Journal, known as the Quarterly, and

WHEREAS, the Kentucky State Medical Association and the Jefferson County Medical Society have each graciously entertained the Auxiliary and visiting ladies at most enjoyable luncheons,

BE IT RESOLVED, that we thank the Association and that the Secretary be instructed to forward a copy of this resolution to the President of each organization, and

WHEREAS, the presence and addresses of Mrs. Johnson, the wife of the Governor of our State, Mrs. Mosiman, National President of the Woman's Auxiliary, and Mrs. Neal, President of the Southern Auxiliary, have contributed so much to the charm and inspiration of our program,

BE IT RESOLVED, that the Auxiliary express to them its genuine appreciation, and

BE IT FURTHER RESOLVED, that we thank each and every one who has contributed to the success of this year's meeting, and

WHEREAS, the Jefferson County Medical Society and the Jefferson County Auxiliary have accorded to us a warm welcome and have extended many gracious hospitalities, therefore,

BE IT RESOLVED, that we here express our deep appreciation and gratitude, and especially thank Mrs. Asman, President of the Jefferson County Auxiliary, for her untiring efforts which have contributed so much to the success of this meeting; and,

BE IT FURTHER RESOLVED, that our Auxiliary express its appreciation for the cooperation accorded it by the Press of Louisville and our sincere thanks to the Brown Hotel for its unfailing consideration of our comfort and convenience.

Respectfully submitted,  
Mrs. F. M. Travis,  
Mrs. H. C. White,  
Mrs. V. A. Stille.

The Final Report of the Committee on Registration and Credentials was given by Mrs. Octavus Dulaney and showed an attendance of 134.

The Report of the Nominating Committee was presented by the Chairman, Mrs. Stephen C. McCoy, as follows:

President-Elect—Miss Grace Stroud, Louisville, Jefferson County.

1st Vice-President—Mrs. Shelby Carr, Richmond, Madison County.

2nd Vice-President—Mrs. N. M. Atkins, Mayfield, Graves County.

3rd Vice-President—Mrs. N. E. Green, Calvert City, Marshall County.

4th Vice-President—Mrs. C. C. Turner, Glasgow, Samson Community.

Recording Secretary—Mrs. John E. Dawson, Ft. Thomas, Campbell-Kenton County.

Treasurer—Mrs. Luther Bach, Bellevue, Campbell-Kenton Counties.

Mrs. George A. Hendon moved the election of the candidates. Nominations from the floor were called for. Mrs. A. T. McCormack nominated Mrs. John B. Floyd, as President-Elect, Mrs. John G. South seconded the motion.

Mrs. McCormack explained that there is an unwritten law that the President-elect shall not be selected from the host county. Whereupon, Miss Stroud withdrew her name from the ballot explaining that she did not want the nomination if there were any objections.

Mrs. John B. Floyd's name was then substituted for Miss Stroud's and the entire ballot was elected.

The new officers were called to the platform and installed by Mrs. George A. Hendon after which Mrs. John G. South gave her Inaugural Address.

The President announced that the Board Meeting would follow immediately. Adjourned sine die; 4:10 P. M.

Grace Stroud,  
Recording Secretary.

How sweet to live in the land of love,  
And to dream that you cannot find  
A heart, that throbs with sting and pain  
From a memory of words . . . unkind!

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**Post Convention Board Meeting**

The Post Convention Board Meeting of the Woman's Auxiliary to the Kentucky State Medical Association was held in the Derby Room, Brown Hotel, Louisville, on Wednesday, October 1, 1941, at 4:15 P. M. with the President, Mrs. John G. South, Frankfort, presiding. A quorum was present. (16 seated)

The President announced the following appointments and asked for the approval of the Board:

Parliamentarian—Mrs. Eleanor Hume Offutt, Frankfort.

Corresponding Secretary—Mrs. Reba Burrow Flynn, Frankfort.

Also, the Chairman for several Committees were appointed but asked for more time for the appointment of others. A motion by Mrs. Joseph Barr, seconded by Mrs. Luther Bach, that these appointments be approved carried.

A motion by Mrs. R. T. Layman, seconded by Mrs. R. B. Flynn that items No. 12 and 24 in the Achievement Project be omitted, carried.

A motion by Mrs. R. T. Layman, seconded by Mrs. R. B. Flynn that the Style Show for the benefit of The Quarterly be sponsored jointly by the State Auxiliary and the Jefferson County Auxiliary if agreeable with the Jefferson County Auxiliary, carried.

The date for the Mid-year Board Meeting was discussed but no definite date decided upon except that, if possible, a meeting will be held in Frankfort in early December.

Adjourned at 4:45 P. M.

(Mrs. John E.) Lucille Dawson

Recording Secretary

**PRESIDENT'S REPORT**

Members of the Auxiliary: When I accepted the gavel of this Auxiliary last fall in Lexington, all of us hoped that we might accomplish great objectives during the year although we wondered what the war in Europe would by this time mean to us and our organization. World events have in the last few months shaken us out of our lethargy and self satisfaction of the past. We have as citizens, as individuals, and as club members stopped to take stock of ourselves, our country and our clubs. We have sifted our standards to see what was essential, what was necessary and what was worthy of being carried on. National defense workers have told us that even our standard of diet was not correct. We have gone scurrying to our kitchens to see what could be done. We have been told that defense against disease was as important as defense against an enemy. We have taken on a new determination to make our homes safe for democracy from within and that includes making it safe for health. As Auxiliary members we are using our influence for high standards of health in our respective communities. But we wonder why we cannot have more interest in Auxiliary work as such? What great motive or incentive could bind All Kentucky's doctors' wives into an organization that would last and hold the interest of All Kentucky doctors? We know that this goal has not been reached.

The reports from your Auxiliary presidents, however, have been excellent and we commend you for your many, many accomplishments. It seems to me that each Auxiliary has made an outstanding contribution. Each has done that which was nearest to the hearts of the members. One has worked for hospital facilities for the negro population of the county; one has supplied the public with over eighty talks on tuberculosis; one has done a great deal of sewing for the needy; one did some landscaping; another conducted an interesting public meeting; several had very interesting and lovely memorial services on Doctor's Day; one held open house at the Doctor's Shop at Harrodsburg; another observed Jane Todd Crawford Day with a luncheon and nice donation, while all have worked to eliminate disease and suffering, to beautify the Jane Todd Crawford Trail, to place Hygeia in the high schools of the State and to educate

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the public in regard to health rules and precautions that should be observed. Our Committee Chairmen have each made outstanding contributions. The essay contests, the radio addresses, the literature distributed, the personal visits of our Organization Chairmen—all of these have had their weight in the advancement of Auxiliary work.

As your President, I have tried to be guided by the advice of the President of the Medical Association and the advisory council and by the rules of the handbook. I have prepared an agenda for each board meeting and have presided at (1) the post convention board meeting; (2), November board meeting and luncheon preceding the Southern Convention; (3), the Spring board meeting and luncheon; (4), the Preconvention board meeting. I attended the luncheon and style show given in Louisville in March. I prepared the Councilor's report to the Southern and from the Southern to the State Auxiliary. I prepared two articles for the Bulletin and four for the Quarterly. I sent two copies of a report to the Auxiliary to the American Medical Association. My daughter and I revised the files of the membership of the Auxiliary and have them ready for my successor as well as all official reports and records. I have tried to keep abreast of the activities of other Women's Clubs, having served during the year as President of the Butler Parent-Teacher Association, Vice-President of the Butler Y. W. C. A., Chairman of the Program Committee of the Butler Woman's Club and as a member of the Somerset Chapter of the Daughters of the American Revolution. I have spoken to the Butler Y. W. C. A. and the Midway Woman's Club on the subject of "Health for Happy Homes" and to the Butler Woman's Club on "Jane Todd Crawford" and again on "Kentucky's Health." I have per-

sonally thanked Mrs. Runner and Mrs. Williams for the Federation's cooperation with our club in using the beautification of the Jane Todd Crawford Trail as one of their objectives for next year. I have attended the meetings of the Licking Valley Auxiliary whenever possible, also the Campbell-Kenton once during the year.

It has been a pleasure and a privilege to work with the members of the Auxiliary to the Kentucky Medical Association. You have been very kind to prepare the many reports that have been requested during the year. I thank you for your loyalty and support. I shall always remember this year as one of the busiest years of my life, rich in friendships and happy in working together with you toward a common goal. I shall go back to my home and husband's office with renewed determination to overlook the annoyance caused by extra work for national defense, with trying to please patients and reheating the potatoes. I shall think with more appreciation perhaps that "Definitely and surely, unreservedly and unmartyredly I like being married to a doctor" and I like the work of an Auxiliary minded doctor's wife.

Respectfully submitted,

(Mrs. John M.) Anna Blades.

A woman, Sarah Josepha Hale, was the motivating force behind our annual observance of Thanksgiving Day which was first proclaimed as a National observance by President Abraham Lincoln in 1863. To be sure the first observance of a Thanksgiving Day in America was held by the Pilgrims in 1621, after their first harvest in Plymouth Massachusetts. But, the occasion was not given National recognition until 167 years later, following repeated requests by Sarah Josepha Hale.

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### INAUGURAL ADDRESS

**Mrs. John Glover South, Frankfort**

As I recall the sixteen able women who have guided the destinies of this organization since its beginning, as I review the fine records they have made, the unselfish hard work they have done, the long way they have carried the Auxiliary to its present position of influence and strength, I am both proud and humble as today I assume the presidency—proud that the signal honor of this office has been conferred upon me, but humble, so humble, when I consider my limited ability. It is particularly hard to follow Mrs. Blades as president, for she possesses the rare combination of marked ability, great tact, and gentle sweetness which have endeared her to each and every one of us.

As the granddaughter and the widow of a doctor there is in my heart an enduring love for the profession to which they gave the full measure of their devotion. So great is the medical profession, so lofty its ideals, so Christ-like its ministrations to suffering humanity, that I assume this office in the Medical Auxiliary with a feeling that I tread on sacred ground.

We face this year one of the most difficult years of our life as an organization. The darkening clouds of war cast increasingly long shadows over the nation. The calls for war work and war financing are becoming greater and greater. Our sympathy for the stricken people of other lands tends to cause us to forego our usual activities and put all of our effort into war work. But we must remember that health is a priority. The legal keepers of the health of our citizens in Kentucky, the medical profession, need its Auxiliary aid now as it has never needed it before.

In times of national crisis such as the present, individual freedom is threatened. American medicine has not escaped, and is today confronted with developments which endanger its established principles. As members of the Auxiliary to this great profession we are aware of the challenge to the freedom of medical practice. We must become actively interested in the political affairs of our democratic form of government, the structure of its party system, and those who control the policies. We must know whether these policies are friendly to the profession if we are to help protect the vital interests of American medicine. We must fully understand the legislation proposed for passage, and be prepared to act intelligently when we are called upon. The Chairman of the Committee on Legislation of the Auxiliary to the American Medical Association has prepared a study program of legislative procedure for our auxiliaries. I shall recommend the adoption of that program as part of our year's work.

Today we face situations in the United States which threaten the liberties we have considered the cornerstones of our republic. There are alien groups among us. We must be alert to subversive activities, firm of purpose, and, above all else, thoroughly informed as to the workings of the political system upon which our democratic way of life depends for its very existence. It has been said that a well informed citizen is a national asset. It can be equally well said that an uninformed citizen is a national liability.

With more and more of our physicians going into war service we must prepare ourselves to assume more and more the work of health education. We must be prepared to recognize the work of quacks and charlatans and the dangerous legislation they will sponsor. We must strive more and more to spread the knowledge of proper nutrition, wisely chosen food, and better living conditions. We must familiarize ourselves as we have never done before with all matters pertaining to child welfare. The children of today are the citizens of tomorrow who must reconstruct a shattered world. They must have strong bodies and fine minds to re-build a world that has known the greatest cataclysm of all time.

If war does not come to our country, reconstruction must. We cannot escape the effects of the carnage, destruction and utter devastation that reigns in Europe. We must be prepared to meet the days of pestilence that always follow

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war of such proportions as the present one. We must be prepared to meet depression and unemployment because of the wrecked trade and economic structures of the world. We must be prepared to meet poverty and discouragement. Again our citizenship must be strong physically and powerful mentally to stand the test. So, upon health and strength which have been built up and are protected by the science of the medical profession depend at last the destinies of the nation.

How great then is the responsibility of the Medical Auxiliary to carry on the work of health education as our doctors are called in ever increasing numbers to the colors. In this hour of growing peril the work that we can do, and should do, as a Medical Auxiliary, is stupendous. We must drive hard for more auxiliary organizations and large numbers. We must work day and night to carry on as the medical profession would have us carry on if we are to be worthy of it. As our doctors answer the call for war service, we must answer the call for home service. We must work harder and harder to help educate all of our people in the basic line of defense which lies in the health of our people. If we meet our full responsibilities as a Medical Auxiliary should, if we answer the challenge as American women should, it is going to take work, sacrifice and courage. Courage, courage,

there is nothing else much worth speaking about to men and women save courage. It is the part of God himself that He has given to His children. You women of the Medical Auxiliary possess courage; you have proven that you do by what you have accomplished in the past. I know you can be depended upon to meet the demands of the future.

I accept the presidency of this organization in this hour with a full realization of the gravity of the responsibility. Alone I can do nothing; with your help we can do much. In my weakness I shall appeal for strength to the one great source of strength, and humbly pray that the God who makes and unmakes nations, and who holds His children in the hollow of His hands will give me vision to see the right, and strength to do the right, and that He will keep my feet in the path that will enable me to guide you wisely through the events of this troubled year to the heights of a new year, when I pray the sun of peace may be shedding its glorious light once more over a war torn world.

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## COUNCILOR'S REPORT OF AUXILIARY TO SOUTHERN MEDICAL ASSOCIATION

Most of you, I presume, remember with pleasure the seventeenth meeting of the Auxiliary to the Southern Medical Association which convened in Louisville last fall, November 12 to 15, 1940. Mrs. Charles P. Corn, President, very graciously opened the meeting and presided at an executive board meeting and breakfast. This was followed by the regular session at ten o'clock. Mrs. Richard T. Hudson, Mrs. Philip E. Blackerby and Mrs. John M. Blades gave greetings to which Mrs. Olin S. Cofer of Atlanta, Georgia, responded. After greetings from the advisory board of the Auxiliary and from the President of the Southern Medical Association, Dr. Arthur T. McCormack, the president of the Auxiliary to the American Medical Association, Mrs. V. E. Holcombe, gave a very helpful address on "Enlarging the Circulation of the National Auxiliary Bulletin." Mrs. Ullman Reaves, assisted by Mrs. Hildred Morrow and Mrs. Sidney Meyers, gave a very impressive memorial service with a special tribute to the late Mrs. Seale Harris who was the founder of the Auxiliary to the Southern Medical Association. Dr. Van Etten then gave an interesting address.

Mrs. William Hibbitts, Texarkana, Texas, was toastmistress at a lovely luncheon given in the Crystal Ball Room on Wednesday. Outstanding on this program was "Pageantry of Pioneer Kentucky," presented under the direction of Mrs. Hilda Wier and Mr. George Hendon. We were invited to attend a program at the Woman's Club of Louisville at 3 o'clock. Dr. Arthur McCormack and Dr. Thomas Parran, Head of the United States Public Health Service, each gave an instructive address on the state of the health of the public with special emphasis on health conditions in army camps. Tea was served by the Louisville Woman's Club. The President's Reception and Grand Ball were held on Wednesday evening.

The Thursday morning session was devoted to reports from officers and State Councilors. It was my privilege to give the Kentucky report. Mrs. Luther Bach read an original paper on "Jane Todd Crawford," which has been distributed throughout the South. Much emphasis was placed on the fact that Councilor's reports should include only an account of 1st, Doctor's Day Observance; 2nd, Research and Romance of Medicine; 3rd, Funds for a Memorial to Jane Todd Crawford.

A delightful luncheon was given at the Pen-dennis Club by the wives of the Jefferson County physicians. A musical recital was very beautifully given. Trips to Bardstown and through the interesting parts of Louisville were arranged for Thursday afternoon. The Louisville ladies were most gracious throughout the Convention and Kentucky's colonels and colored lads, as portrayed on the programs, could not have added more to the cordial welcome and delightful entertainment.

Respectfully submitted,

(Mrs. John M.) Anna Blades.

(Proceedings Continued in Next Issue)

## TWO KINDS

There are two kinds of people on earth today,  
Just two kinds of people—no more, I say;  
Not the good and the bad, for 'tis well understood  
That the good are half bad and the bad are half good;  
Not the rich and the poor, for to count a man's wealth  
You must know the state of his conscience and health.  
No, the two kinds of people on earth that I mean  
Are the people who lift and the people who lean.  
Wherever you go, you will find the world's masses  
Are divided up in just these two classes.  
And, oddly enough, you will find, too, I ween,  
There is only one lifter to twenty who lean.

—Clipped from Davenport.

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# JANE TODD CRAWFORD MEMORIAL

HER BIRTHPLACE DISCOVERED, DR. TOMPKINS WRITES

Lexington, Virginia,  
September 24, 1941

Mrs. A. T. McCormack,  
Brown Hotel,  
Louisville, Ky.

My dear Madam:

I am sorry to say that I have not a copy of the paper on the matter of Jane Todd's birthplace—she who later became Jane Todd Crawford. Nor have I even a carbon, nor a note, I simply wrote the paper and sent it in to the Virginia Magazine of History and Biography.

However, briefly my procedure was this: I took the deed books and examined them as to where Jane's father, Samuel Todd, bought land, and later sold it. I found he bought some land "on the North branch of Buffalo Creek," and within four years sold it. The price he gave, and the price he obtained—only slightly larger an amount—proved to me that no buildings were on that land. The same was true of another smaller tract. But as to the land he owned on Whistle Creek—and which he continued to own for almost thirty years—this was not true; he paid I think about 170 pounds, (Virginia currency, \$3.33 to the pound), and sold for one thousand pounds. The difference here would certainly indicate he had buildings. As a matter of fact, he undoubtedly built a mill on this land, as well as a dwelling. (As to his mill, I wrote a second paper, which also has been submitted to the Virginia History Magazine.)

The dwelling—still on this land—is a stone building, known for a century past as "Rock Castle," and to it in later years a frame addition has been built. It stands on a hill overlooking Whistle Creek, which is a small stream, and also overlooking the mill which still operates by water power from Whistle Creek. It is only about 3 miles west of Lexington, on U. S. Route No. 60, so is easy of access. I feel morally certain that Rock Castle was built by Samuel Todd, that it was occupied by him and his family, and that they were living there when Jane was born. This house was later owned and lived in by Dr. Samuel LeGrand Campbell, a president of Washington College, now Washington and Lee University, Lexington.

Inasmuch as the region now occupied by Lexington, and by the Whistle Creek vicinity, was from 1745 to 1770 a part of Augusta County, from 1770 to 1778 within the boundary of Botetourt county, and after 1788 in Rockbridge county, my investigation of Samuel Todd's landholdings necessitated inspection of records of

Augusta county and Botetourt county as well as of Rockbridge county.

Samuel Todd followed his daughter to Kentucky, for in 1807 he gave to John Wilson a "power-of-attorney," to sign a deed for him, and early in 1808 Wilson used this power-of-attorney to sign a deed to land sold by Todd, showing that Todd had left this community by then. In the P. of A. he says: "Being about to move to Kentucky." Inasmuch as no wife's name was signed, nor apparently needed, it is most likely, I think, that she was no longer living, when he sold the Whistle Creek lands. She was a daughter of John Lowry, who lived in the northern portion of Rockbridge county, because John Lowry in his will mentions "Samuel Todd, my son-in-law."

This has been a very pleasant little piece of research work; I have proved to my own satisfaction that Rock Castle was the identical spot where the heroic Jane Todd was born; moreover, I have submitted my paper (before sending it in) to several competent local historians, who all agree with my conclusions, and say they are convinced the deductions drawn from facts recorded in legal papers are sound.

Some time soon I hope to obtain photographs of the house, "Rock Castle," and of the mill as it now appears.

Again with thanks for your very kind letter, I am,

Very Cordially Yours,  
E. P. TOMPKINS, M. D.

Librarian Rockbridge Historical Society.

## KITTENS IN A BASKET

Mildred Telford Barnwell, Louisville

My cat's rough tongue, mindful of its maternal duty,

Has licked three tawny kittens  
Into charming balls of beauty.

Now smoothed and fed, each yellow head  
Is pillowed on her placid breast  
Like downy chickens come to rest.

And, overseas, where guiltless children can't  
be fed,

Fond masters slay their pets, for lack of meat  
and bread!

Americans! In gratitude, bow each humble head,  
As earnestly and with reverence I ask it—  
God make this good world safe once more  
For kittens in a basket!

—Courtesy, Love Story Magazine.

## AUDITOR'S REPORT

for

## WOMAN'S AUXILIARY TO THE KENTUCKY STATE MEDICAL ASSOCIATION

To the Woman's Auxiliary, Kentucky State Medical Association:

We submit herewith report of our audit of the books and records of your Treasurer, Mrs. Luther Bach, and your Business Manager of "The Quarterly," Mrs. William H. Emrich, for the period beginning August 1, 1940, and ending August 1, 1941.

The various exhibits and statements submitted herewith set forth in detail the financial transactions for the period and show the condition of your affairs as reflected by your records.

We hereby certify, in our opinion, the attached exhibits and statements correctly present the assets of the Woman's Auxiliary, Kentucky State Medical Association, at August 1, 1941, and its receipts and disbursements for the period from August 1, 1940, to August 1, 1941, as reflected by its records.

Respectfully submitted,  
(Signed) Heimerdinger & Dennis  
Certified Public Accountants

## EXHIBIT "A"

## RECEIPTS

Gross dues received.....	\$ 167.00	
Less American Medical Association Auxiliary dues.....	79.50	
State dues received.....		\$ 87.50
For account Jane Todd Crawford Fund.....		10.05
Total Receipts for 1940-1941.....		\$ 27.55

## DISBURSEMENTS

Office Supplies, Postage and Badges.....	\$ 5.00	
Printing and Stationery.....	15.65	
President's Expense.....	100.00	
Auxiliary Sundries.....	9.63	
Total Disbursements.....		\$ 130.30
Disbursements More Than Income.....		\$ -32.75
Balance on hand August 1, 1940, Campbell County Bank, Bellevue, Kentucky.....	\$ 106.08	
Less transfer to the account of The Quarterly.....	20.65	85.43
(Supplement to the Kentucky Medical Journal)		
Balance on hand August 1, 1941, Campbell County Bank, Bellevue, Kentucky, Including \$26.45 for J. T. C. Funds.....	\$ 98.68	
July Receipts Deposited August 6, 1941.....	4.00	
	\$ 102.68	
Outstanding Check No. 35, Issued September 30, 1940, to Mrs. J. M. Blades, President.....	50.00	\$ 52.68

## SAVINGS ACCOUNT

Louisville Trust Company, Louisville, Refunding Certificate No. 15956.....		\$ 26.61
Louisville Trust Company, Louisville, August 1, 1940, Savings Account Balance.....	\$ 64.84	
In name of Mrs. Luther Bach, Treasurer		
Payment on Louisville Trust Company Depositors Refunding Certificate No. 14258.....	20.06	
Interest.....	\$ .53	
Less Government Tax.....	.09	.44
Total Savings Account Deposited in Louisville Trust Company, Louisville, August 1, 1941.....		\$ 85.34
Total Assets.....		\$ 164.63

## EXHIBIT "B"

## JANE TODD CRAWFORD MEMORIAL FUND

1940-1941

## RECEIPTS DEPOSITED IN CHECKING ACCOUNT

1940		
Dec. 6—Franklin County Auxiliary, Frankfort.....	\$ 5.00	
Dec. 14—Samson Community Hospital, Glasgow.....	3.05	
1941		
April 25—Mrs. Bernard Asman, Louisville.....	2.00	
Total.....		\$ 10.05



## EXHIBIT "C"

Paid Membership to August 1, 1941

	1937	1938	1939	1940	1941
Ballard-Carlisle	5	17	13	15	11
Carloway	1	2	11	5	10
Campbell-Kenton	5	25	12	13	14
Franklin	4	20	21	25	24
Graves	17	11	55	16	12
Harlan	11	11	11	28	15
Jefferson	114	110	113	113	111
Madison	36	32	23	33	33
Marshall	6	8	5	10	10
McCracken	36	3	11	15	15
Mercer	16	12	16	15	15
Newton	9	8	11	11	11
Warren	11	20	21	15	15
Licking Valley	17	15	8	22	23
Sampson Community Hospital	21	8	26	16	16
State at Large	245	253	215	338	304
Totals	245	253	215	338	304
300 Memberships (from County Auxiliary) @ \$.50					\$150.00
17 State at Large Memberships					17.00
Total dues collected					\$167.00

## EXHIBIT "D"

Detailed Statement of Receipts and Disbursements of Mrs. Luther Bach, Treasurer, Woman's Auxiliary, Kentucky State Medical Association, from July 23, 1940, to August 8, 1941.

1940

	Receipts	Disbursements
July 23—Balance Forward	\$106.08	
Sept. 30—Check No. 34 to Mrs. Enrich, which should have been sent to her instead of to Treasurer. (Ad. commission)		20.65
Sept. 30—Check No. 35 to Mrs. J. M. Blades, for President's expenses		50.00
Aug. 15—Dues, Calloway County Auxiliary, Mrs. L. D. Hale, Murray, Kentucky	5.00	
Sept. 21—Dues, Marshall County Auxiliary, Mrs. W. T. Little, Calvert City, Kentucky	1.00	
Oct. 6—Dues, Marshall County, Mrs. N. E. Green, Calvert City, Kentucky	1.00	
Sept. 17—Dues, State-at-Large, Mrs. T. M. Marks, Lexington, Kentucky	1.00	
Sept. 23—Dues, State-at-Large, Mrs. Wm. Burr Atkinson, Campbellsville, Kentucky	1.00	
Sept. 23—Dues, State-at-Large, Mrs. Clark Bailey, Harlan, Kentucky	1.00	
Sept. 23—Dues, State-at-Large, Mrs. Ernest Bradley, Lexington, Kentucky	1.00	
Sept. 23—Dues, State-at-Large (2 yrs.) Mrs. A. W. Davis, Madisonville, Kentucky	2.00	
Sept. 23—Dues, State-at-Large, Mrs. C. M. Fischback, Smithland, Kentucky	1.00	
Sept. 23—Dues, State-at-Large, Mrs. Chas. F. Long, Elizabethtown, Kentucky	1.00	
Sept. 23—Dues, State-at-Large, Mrs. Addie M. Lyon, Hopkinsville, Kentucky	1.00	
Sept. 23—Dues, State-at-Large, Mrs. T. J. Marshall, Paducah, Kentucky	1.00	
Sept. 23—Dues, State-at-Large, Mrs. O. P. Miller, Lexington, Kentucky	1.00	
Sept. 23—Dues, State-at-Large, Mrs. C. R. Maston, Madisonville, Kentucky	1.00	
Sept. 23—Dues, State-at-Large, Mrs. E. C. McGehee, Ashland, Kentucky	1.00	
Sept. 23—Dues, State-at-Large, Mrs. J. A. Orr, Paris, Kentucky	1.00	
Sept. 23—Dues, State-at-Large, Mrs. Owen Pigman, Whitesburg, Kentucky	1.00	
Sept. 23—Dues, State-at-Large, Mrs. Edward Wilson, Sr., Pineville, Kentucky	1.00	
Nov. 30—Dues, State-at-Large, Mrs. Owen Carroll, New Castle, Kentucky	1.00	
Nov. 30—Dues, Jefferson County, Mrs. J. Park Ogden, Louisville, Kentucky	58.50	
Dec. 6—Check for \$5.00 from Franklin County Auxiliary for Jane Todd Crawford Fund, Mrs. R. M. Coblin	5.00	
Dec. 14—Check for \$3.05 from Sampson Community Hospital Auxiliary for Jane Todd Crawford Fund	3.05	
Dec. 21—Check No. 36 to Mrs. Luther Bach for expenses for S. M. A. which she had paid from her own funds during meeting		4.00

1941

Jan. 10—Check No. 37 to Times-Journal Publishing Company, Bowling Green, Kentucky, for stationery		15.65
Feb. 5—Dues, Licking Valley Auxiliary, Mrs. Jno. Blades, Butler, Kentucky	7.50	
Mar. 3—Dues, Sampson Community Hospital, Mrs. A. B. Bryan, Glasgow, Kentucky	11.50	
Mar. 24—Dues, Marshall County Auxiliary, Mrs. Fern Green, Calvert City, Kentucky	3.00	
March 29—Dues, Graves County Auxiliary (1941) Mrs. J. M. Maves, Mayfield, Kentucky	6.00	
March 27—Dues, Hardin County Auxiliary, Mrs. R. T. Layman, Elizabethtown, Kentucky	7.50	
March 26—Dues, Madison County Auxiliary, Mrs. O. F. Hume, Richmond, Kentucky	15.50	
March 29—Dues, Mercer County Auxiliary, Mrs. G. E. Lowery, Harrodsburg, Kentucky	7.50	
March 27—Dues, Franklin County Auxiliary, Mrs. R. M. Coblin, Frankfort, Kentucky	12.00	
March 28—Dues, Campbell-Kenton County Auxiliary, Mrs. H. C. White, Covington, Kentucky	7.00	
April 4—Dues, Madison County Auxiliary, Mrs. A. T. Hume, Richmond, Kentucky	1.00	
April 25—Check for \$2.00 from Mrs. Bernard Asman, to be applied to the Jane Todd Crawford Fund	2.00	
April 7—Check No. 38 to Mrs. D. W. Thomas, Lock Haven, Pa. State dues to National Treasurer		79.50
April 7—Check No. 39 to Mrs. Luther Bach, for postage		1.00
April 24—Check No. 40 to Mrs. John Blades, for President's Expenses		50.00
April 26—Dues, Jefferson County (4 members in arrears) Mrs. O. H. Kelsall, Louisville, Ky.	2.00	
April 28—Check No. 41 to Mrs. Joseph Wier, for postage		4.00
May 28—Check No. 42 to F. W. Petris for flowers for Dr. Austin Bell		5.65
June 17—Dues, Licking Valley Auxiliary (Dues in arrears) Mrs. Blades, Butler, Kentucky	2.50	
July 18—Dues, Jefferson County Auxiliary (Dues in arrears) Mrs. O. H. Kelsall, Louisville, Ky.	1.50	
Total Receipts plus balance brought forward beginning of period	\$283.13	
Total Disbursements		230.45
Balance on hand, Campbell County Bank, Bellevue, Kentucky, August 8, 1941		52.68
	\$283.13	283.13

EXHIBIT "E"

Collections and Disbursements by Mrs. William H. Emrich, Business Manager, from August 1, 1940, to August 1, 1941, on account of "The Quarterly," Supplement to the Kentucky Medical Journal, corresponding with checks, deposits and receipts filed.

RECEIPTS

Receipts from Advertisers—August 1, 1940 to Aug. 1, 1941:—	
Old Accounts Paid:	
Total Collections Old Accounts.....	\$192.40
1941 Accounts .....	795.32
Total Received from Advertisers.....	\$ 987.72
State Medical Journal 1940 Adv. Commission.....	20.65
Contributions .....	63.10
Style Show .....	117.80
Total Receipts 1940-1941.....	\$ 1,189.27

DISBURSEMENTS

Expense of Quarterly.....	\$1,031.73
Commission on advertisements—20% on \$754.70	
Collections paid to Advertising Manager.....	150.94
Bank Service and Tax .....	1.00
Total Disbursements 1940-1941.....	\$ 1,183.67
Profit on Operation 1940-1941.....	\$ 5.60
Balance in Liberty Bank and Trust Co., Louisville, beginning of period.....	153.44
Total Balance agreeing with Bank Balance as of August 1, 1941, Liberty Bank & Trust Company, Louisville.....	\$ 159.04
Accounts Receivable:	
1939 Accounts.....	\$ 12.50
1940 Accounts.....	35.00
1941 Accounts.....	194.40
Total Assets.....	\$ 400.94
Liabilities:	
Accounts Payable.....	\$ 400.94
Net Worth.....	

EXHIBIT "F"

Contributions to  
THE QUARTERLY

1940		
Aug. 23—Hardin County Medical Auxiliary.....		\$ 10.00
29—Mrs. H. V. Usher.....		1.00
Sept. 14—Graves County Auxiliary.....		2.50
25—Marshall County Auxiliary.....		5.00
25—Mrs. A. C. White.....		2.00
27—Mrs. V. A. Stilley.....		1.00
Oct. 11—Mrs. Wier's donation of commission for book sale.		
(Medicine And Its Development In Kentucky).....		15.40
16—Mrs. John G. South.....		1.00
31—Mrs. Wier's donation of commission for book sale.....		2.10
Dec. 1—Mrs. Corn.....		1.00
2—Steiden Stores.....		10.00
3—Mrs. Wier's donation of commission for book sale.....		2.10
1941		
Apr. 18—Samson Community Hospital Auxiliary.....		5.00
June 24—Franklin County Auxiliary.....		5.00
Total Contributions August 1, 1940, to August 1, 1941.....		\$ 63.10

EXHIBIT "G"

THE QUARTERLY  
Accounts Receivable

Firm (1940)		
Wheatley Mayonnaise .....	Mrs. Joseph Wier.....	\$35.00
1941		
Barr, Mrs. Jos.....	Mrs. Joseph Wier.....	8.25
Butterman Ice Cream Company.....	" " ".....	17.50
Denhard, Brooks.....	" " ".....	20.00
Jaglowicz Jos.....	" " ".....	11.25
Kentucky Macaroni.....	" " ".....	12.50
Kentucky Hospital Association.....	" " ".....	10.00
Kentucky Tent & Awning.....	" " ".....	14.00
Meffert Equipment Company.....	" " ".....	11.25
Model Drug Co.....	" " ".....	11.25
Renee Dress Shop.....	" " ".....	15.00
Rebecca Ruth Candies.....	" " ".....	8.40
Times-Journal Publishing Company.....	" " ".....	8.75
Wilderness Trail Shop.....	" " ".....	11.25
Wheatley Mayonnaise .....	" " ".....	35.00
Total.....		\$194.40
		\$241.90

LEADING DOCTORS

not only indorse our plan, but many actually are members. Hospitals throughout the Nation, including U. S. Gov. hospitals, recognize and co-operate with us.

Kentucky Hospital Service Assn., Inc. Membership Division

Republic Building

Louisville, Ky.



## EXHIBIT "H"

## Detail of Advertisements September 1940, to September 1941

Firm	Contract	Paid
1 Arctic Ice Co.....	\$ 20.00	\$ 19.60
2 Barr Tourist Home.....	11.25	3.00
3 Barrett Francis.....	11.25	11.25
4 Baynam Shoes.....	20.00	19.60
5 Bush-Krebs.....	11.25	* 4.35
6 Butterman Ice Cream Co.....	35.00	17.50
7 Clara Hats.....	11.25	11.02
8 Cralle, Lee E.....	35.00	34.30
9 Crown Laundry.....	11.25	11.03
10 Crutcher Dental Depot.....	11.25	11.25
11 Carrell Rogers.....	5.00	5.00
12 Deuhard Surgical Supplies.....	20.00	
13 Dolfinger China Co.....	11.25	11.03
14 Emmart Packing Co.....	20.00	19.60
15 Gilliland Laboratories.....	100.00	100.00
16 Grocers Baking Co.....	35.00	34.30
17 Hampton Crackers.....	35.00	34.30
18 Hirsch Food Products.....	11.25	11.25
19 Hulskamp Drugs.....	11.25	11.02
20 Jaglowicz Tailor.....	11.25	
21 Jefferson Co. Milk Commission.....	20.00	20.00
22 Ky. and Ind. Terminal Railroad.....	60.00	60.00
23 Ky. Hospital Service Association.....	20.00	10.00
24 Ky. Macaroni Co.....	12.50	12.50
25 Ky. Tent and Awning Co.....	14.00	
26 Kroger Grocery Co.....	35.00	34.30
27 Louisville Apothecary.....	11.25	11.25
28 Louisville Crematory.....	20.00	20.00
29 Medical Arts.....	11.25	11.25
30 Meffert Equipment Co.....	11.25	
31 Millinery Studio.....	11.25	11.02
32 Minish and Potts.....	6.25	6.25
33 Model Drugs.....	11.25	
34 Muldoon Monument Co.....	11.25	11.25
35 Muth Optical Co.....	11.25	11.25
36 Newman Drug Co.....	20.00	20.00
37 Premier Paper Co.....	20.00	20.00
38 Powell Seed Co.....	10.00	10.00
39 Porter Paint Co.....	20.00	20.00
40 Renee Womens Apparel.....	20.00	5.00
41 Sign of the Pine Tree.....	11.25	11.25
42 Shackleton Piano Co.....	25.00	25.00
43 Southern Optical Co.....	20.00	19.60
44 Stoll Oil Refinery.....	20.00	20.00
45 Tachau, E. S. & Sons.....	11.25	11.25
46 Tafel Surgical Supplies.....	20.00	20.00
47 Times-Journal.....	35.00	26.25
48 Rebecca Ruth Candies.....	11.25	2.85
49 Wilderness Trail Gift Shop.....	11.25	
50 Wheatley Mayonnaise.....	35.00	

Total Collected..... \$ 795.32  
 \*Paid in service

## EXHIBIT "I"

## Detailed Statement of Cash Receipts and Disbursements Aug. 1, 1940 to Aug. 31, 1941

## RECEIPTS

1940	\$ 56.50
August.....	43.40
September.....	71.35
October.....	91.17
November.....	140.67
December.....	
1941	118.38
January.....	173.75
February.....	300.60
March.....	5.95
April.....	13.75
May.....	115.00
June.....	58.75
July.....	
Total Receipts 1940-1941.....	\$ 1189.27

## DISBURSEMENTS

1940	
October 20—Times-Journal for October Issue, Check No. 52.....	\$ 264.11
October 31—Bush-Krebs, Engraving, Check No. 53.....	9.43
November 2—Mrs. Jos. E. Wier, Commission on Ads, Check No. 54.....	35.24
1941	
January 20—Times-Journal for Jan. Issue, Check No. 55.....	278.81
March 16—Mrs. Jos. E. Wier, Commission on Ads, Check No. 56.....	115.70
April 19—Times-Journal for April Issue, Check No. 57.....	213.64
July 23—Times-Journal for July Issue, Check No. 58.....	239.12
Bank Tax.....	1.00
July 25—Postage, Express, Long Distance Call and a New Ledger, Check No. 59.....	26.62

Total Disbursements..... \$1183.67

Amount Collected after books were audited:

Wheatley Mayonnaise.....	\$ 35.00
Barr Tourist Home.....	8.25
Graves Co. Aux. (donation).....	2.50
Model Drug Co.....	11.25
Total.....	\$ 57.00

### DOCTORS DAY OBSERVANCE

Mrs. Russell E. Kinsey, Williamstown, Chairman

Doctors Day Observance was set for May 30, 1941 (See Minutes of Executive Board Meeting, November 12, 1940, p. 6, January, 1941, Quarterly). Each local Auxiliary was asked to give a Tea in honor of all physicians, to place a wreath on the grave of each deceased physician in the County and to do as much biographical research as possible.

Written biographical sketches about physicians not already published were invited to compete for publication in the Quarterly for the one receiving highest judgment. Mrs. M. C. Darnell, Frankfort, received first honors, Mrs. E. L. Garrett, Murray, second. Their papers are both interesting and instructive. Mrs. Darnell's paper follows:

### DOCTORS OF FRANKLIN COUNTY, KENTUCKY

Mrs. M. C. Darnell, Frankfort  
PART I, INTRODUCTION.

"The tribe of Frankfort Physicians," boasted a fiery political newspaper soon after beginning publication in 1806, "have for good cause declared WAR against the WESTERN WORLD. They say the Editors have contrived, by attracting the attention of the citizens, to drive away the ague and bilious fever."

Through old newspapers and documents, we learn that in Frankfort at that period were Dr. Isaac E. Gano and Dr. John M. Scott. Later are mentioned Doctors Alexander Mitchell, Winters, Wilkinson, Mills, Swope, John Roberts, Leander J. Sharp, Craig, Twyman, Preston Brown, and perhaps others. About 1850 or later were Doctors S. T. Newman, O. S. Wilson, O. H. Dickinson, William Phythian, Edward H. Watson, Williamson T. Price, Joseph G. Roberts, Benjamin Monroe, William C. Sneed, Hugh and James Rodman, Luke P. and Churchill J. Blackburn, Benjamin Hensley, Alexander M. Blanton, Lewis Sneed. In 1827 Richard Carter, an "Indian Doctor," was there, and in 1868 G. H. Day, a homeopath.

Out in the county, some of the doctors are assigned to the various districts through tradition, while the location of others is merely suggested by their family names, and the list is subject to much correction.

On Elkhorn were Doctors Francis Head, Leonard Y. Hodges, "Old Doctor Duvall" (possibly Benjamin F.), Dr. Gayle who was "over in the hills," William Morris, and Dr. Ransdall, who had among his remedies "fire drops, poke root, and percoon root," while for swelling he recommended the marrow obtained by mashing an old hog jaw—the older the better. The account tells of his going to see a woman who had

## Lady Betty SALAD DRESSING

Made from the purest ingredients Lady Betty Salad Dressing adds just that final regal touch to those appetizing tasty salads that make their appearance at this season of the year. Have them more frequently.



Wheatley Mayonnaise Co.

Louisville - Jacksonville - Dallas

been given up to die, "and he says, 'Madam, this Lady ought to Get well. I did not come here for a Job, but if you will allow me to Rub her feet, she will Set at the table to Dinner Tomorrow.'" Consent was given, and the miracle accomplished. The narrator continues, "I speak of him as something out of that Routine of Fashionable Medical practice." A premature chiropractor, perhaps.

In the Woodlake neighborhood were Doctors William Price and W. M. Wilson; while practicing in the Jett neighborhood, though living over the border in Woodford, were Bradford C. Sneider, a disciple of Dr. Ransdall, who was also a "steam doctor," Robert Vaughn, and John Sullenger. Preston B. and John O. Scott, though born at Jett, located elsewhere.

The records indicate that in the vicinity of Bridgeport, southwest of Frankfort, were Doctors Henry Newberry, Thomas and Samuel Shannon, Major John Vaughan, S. B. Crockett, J. W. Hall, J. O. T. Hawkins, Achilles F. and Thomas Sneed, and Andrew Neat. Dr. William Bailey, of Louisville, was born in that neighborhood.

These are some of the pioneer doctors who served the people so faithfully throughout the years, and to them is due a debt of gratitude—though if they could collect their debts in cold



cash they might be willing to forego some of the gratitude. Perhaps they should have adhered more closely to the maxim of one of their number; "The time to collect is while they have tears in their eyes."

#### PART II, DR. U. V. WILLIAMS

In 1833 the stars fell, and one of them, say the inhabitants of Bridgeport, was Dr. Williams, who had just finished hanging the moon.

Urban Valentine Williams (1833-1920) was the son of David and Elizabeth Rowe Williams, who came from Culpepper County, Virginia, and settled near Bridgeport. All records and diplomas having been lost in a fire, the only facts known of his early life are that he graduated from Jefferson Medical College, and that he taught school and practiced for some time in Anderson County.

In 1862 he married Clementine Wilcox. She was reared by her uncle, Captain John Russell, that romantic, swashbuckling hero of the steamboat age, who, in that day when schools were scarce, sheltered under his roof at one time fourteen of his young relatives who lived too far away to make the trip daily to the Bridgeport school. Mrs. Russell, it is said, would always send a servant to the school at noon with a bushel basket of lunch.

Dr. and Mrs. Williams had four children: David, who died when very young; Martha (Pattie); Minnie; and John W. R., who married Susan Morris, and who until his retirement conducted a popular drug store in Frankfort. In 1880, after their home in Bridgeport burned, they came to Frankfort.

Though crippled from babyhood with infantile paralysis, Dr. Williams never allowed it to interfere with his career. He liked to drive wild horses, and partially in consequence of this, had his leg broken thirteen different times, though his spirit was never tamed. He seldom referred to his lameness, though once, being asked what was his idea of heaven, he said he liked to think of it as a place where he and his wife (who was crippled with arthritis,) could throw away their crutches "and go skipping down the golden streets."

When he began practicing there were no trained nurses, and it is said that he would sometimes remain for days with a seriously ill patient, lying on the bed beside him and ministering to him as necessary. One who knew him well said that people had confidence in him because he would tell them what to expect; while another said, "He didn't have any 'bedside manner'—he just up and told you." He himself says: "Our diagnosis in those days was easier and more accurate. We only described diseases geographically. Only had head complaints, breast



complaints (consumption and lung fever, which was beginning to be called pneumonia); bowel and liver complaints.—I have made a few abdominal sections, all successful, because made post mortem."

For about two years after coming to town, Dr. Williams gave lectures on anatomy to the children of the city school. Those dear, dead days! Now they learn anatomy at the beach.

When elected members of the Frankfort Board of Education, Dr. Williams and Major Henry T. Stantin were rival candidates for the office of President but after nearly a hundred ballots had been cast by the little group, Dr. Williams was elected, and held the office through many years. His first official act was to ask for an increased appropriation for the school.

He was a prominent leader among the Baptists, serving as Moderator of the Franklin County Association for a long time, and as Superintendent of the Sunday School in Frankfort from 1880 till 1905, when he was presented with a loving cup upon his retirement. He was an authority on the history of that denomination, as many of his writings attest. He was also a prolific writer for the medical press, his articles being of great value because he was ever alert for progress. Being a witty and well versed speaker, he was much in demand, and to paraphrase, "Wherever Dr. Williams sat, there was the head of the table."

His patients adored him, and only a few weeks ago, when his name was mentioned, one said wistfully that she never had stopped missing him. Children were sometimes frightened at the sight of the huge figure with the leonine head and the unlimited mustache, but they soon penetrated his armor, and found that he was one of their pals. Whenever he walked down the street, there was indeed "the pause that refreshes," for his appearance was the signal for everyone he met to stop for a greeting or a joke.

But it was in his own home that he was at his best. Mrs. Williams amplified the atmosphere in which she had been brought up, and their home was a place to which friends, relatives, and acquaintances felt free to go at any and all times. There was always much laughter there, for he loved to tease the young people, but the warm, genuine affection underlying it made them eager to come back for more.

### Hulskamp Drug Co., Inc.

Clara C. Hulskamp, Sec.-Treas.

N. W. Corner Sixth and Kentucky

Phone WA 9737 — Louisville, Ky.

Being host was to him a supreme pleasure, in which he frequently indulged. To celebrate the fiftieth anniversary of the beginning of his practice, he had a ten-course dinner that was attended by the medical profession and other friends from all over the country. One admirer, in a long poem, voiced this question:

"He was mostly in the saddle

In a rig or on the street,

For no matter what the weather

He was always on his beat.

And I used to often wonder

When he slept and when he ett,

For he never had his clothes off,

Even when his leg was set."

One of the doctors present told a tribute from a woman in Bridgeport. This young doctor had just brought her through a dangerous illness, and was feeling very, very proud of himself, when the patient remarked, "If I could just hear the sound of Dr. Williams' crutch on my plank walk, it would do me more good than all your medicine."

#### PART III, DR. E. E. HUME

Edgar Enoch Hume (1844-1911) was born in Trimble County, Kentucky. He was the son of Rev. Louis and Lamira McGee Hume, who came from Fauquier County, Virginia. They lived in Spencer County for several years, and when Edgar was thirteen his father took charge of the Jefferson Street Christian Church in Louisville, and moved his family there.

When the war broke out, his father became a chaplain in the Confederacy, and the boy planned to serve also, but he was captured in the act of enlisting, and sent to Camp Chase, Ohio. After his release he decided to study medicine, but since the family had lost everything in the war, he worked for some time in a lumber camp in Pennsylvania to raise the necessary funds.

He began reading medicine at the age of twenty, and was graduated from the University of Louisville in 1869. In this experimental stage he practiced for eighteen months in the Critten-

#### I AM POLITICS!

"I am the struggle of men and groups for office and for power.

You know my vices well.

And so you pride yourself that you will have nothing to do with me.

But I have much to do with you—and especially your children.

Through me their nation is governed.

Through me their roads and bridges are built, their letters carried across the earth, and their daily life directed.

I guard their health.

I share in educating them.

I protect them from floods and famine.

I make laws, good and bad, under which they live.

And I do those things for the welfare or the ill of your children according as you have something to do with me.

You can ignore me, but I will not overlook you.

I AM POLITICS!"

—Percy Hayward

—From Sparks, January 10, 1937.

den Military Hospital in Louisville, where, he used to say afterward, he did far more damage to the Yanks than he could have done with a gun.

He practiced for a while in Anderson County, where he roomed with Champ Clark, who was at that time a country school teacher. Going to New York for further study, he was graduated from Bellevue in 1875. He returned to Anderson County, to find that his friends had elected him to the Legislature, in which he served for one term as Representative.

In 1877, in the Christian Church in Frankfort, where he afterward served as deacon, he was married to Mary Ellen South, daughter of Col. Samuel and Malvery Jett South. Two children were born to them: Lieut. Col. Edgar Erskine, prominent in geneological and historical research, who married Mary Swigert Hendrick, and is with the U. S. Army Medical Service in Washington; and Eleanor, who married Henry F. Offutt, of Frankfort, and who is known throughout Kentucky for political and club work, in addition to being an authority on antiques.

In 1880 Dr. Hume located in Frankfort, where his skill and his personality soon made him a leader in his profession. Much has been said of his mild and gentle disposition, his sympathy and his generosity, so there is little to add except that he possessed an almost uncanny psychological understanding of his patients' moods, and responded accordingly. It means much to a patient to know that the doctor does not forget him as soon as he leaves the room, and when

### LOUISVILLE APOTHECARY, Inc.

"Ask your Doctor" about this "Prescription Drug Store"

337 W. Broadway

Louisville, Ky.



Dr. Hume would fish an orange out of his coat-tail pocket, it tasted sweeter than the ambrosia of Parnassus. One of his old colored friends always referred to him as "Dr. Human"—an apt designation!

In his constructive and forward-looking plans he was truly a statesman. He was much interested in the emancipation of women, and while in the Legislature introduced a bill giving married women equal property rights with men. Before that time, a woman gave up everything when she married, and it is maddening to read in the old documents of some chivalrous man who wills to his wife the spoons she inherited from her parents!

This was a drastic move, and it met with angry opposition among the lords of creation. One indignant defender of the faith arose, and with tears in his voice painted a picture of a man left with a family of little children, his wife having willed her property out of his control, and asked, "What could the poor widower do?" To which Dr. Hume retorted, "He could do the same that many a poor widow has had to do!" The bill became a law.

He was equally solicitous about the physical status of women, and wished for them the easiest life possible. Once when a convalescent asked if she could sew a little, he said, "No indeed! Sewing machines are not fit for anybody to use but convicts."

He was one of the founders of the Franklin County Medical Society, of the Kentucky Midland Medical Society, and of the Southern Association of Railway Surgeons, and served at some time as President of each. Though an unspectacular worker, he had many influential friends, and through them he did much toward the improvement of Kentucky's rivers and roads.

When Goebel was shot, he asked to be taken to Dr. Hume's office. Dr. Hume at the time was attending one of the Taylor family at the Mansion, and thus for several days he had the unique experience of being the only person in Frankfort who was in touch with both sides.

He was mayor of Frankfort from 1905 to 1909, and his administration was in keeping with his character.

Remembering the difficulties in the way of his own schooling, one of his objectives was to put education within the reach of all. He worked for the establishment of our State Normal Schools, and as chairman of the executive committee of the State Educational Improvement Commission, in 1907 he called at Mammoth Cave a statewide teachers' meeting at which was organized the Kentucky Educational Association.

Nor were his colored friends neglected. For many years, as chairman of the board of trustees

of the Colored Normal School in Frankfort, he did so much for them that in gratitude they named one of their buildings "Hume Hall." The students there have a beautiful custom of driving through the streets of Frankfort in the early hours of Christmas morning, singing carols. Each street gets only a fragment of their melody, but when they come to the home of Dr. Hume's daughter, there they linger and pour forth their most joyful songs of praise.

When Dr. Hume passed away, a colored woman came to his home and asked for a last look. She stood for a while beside the coffin, and then said softly, "To me, he was next to Jesus."

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### RESPONSIBILITY

I have a clean, soft bed on which to sleep;  
I have a table set with gracious things.  
How can I pray the Lord "my soul to keep,"  
How can my heart lift up on joyous wings,  
While there are those about in the night  
Who toss on filthy rags and cannot rest,  
Who have no food, and no raiment, and no light?  
How can I sleep unless I do my best  
To ease and comfort them, and how can I  
Be deemed a follower of the Christ until  
I heed humanity's heart-broken cry,  
And move to feed the hungry, heal the ill?  
God help me keep remembering—help me see  
How Grave is my responsibility.

—Grace Noll Crowell

Courtesy of Sparks.

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### BLOOMING DOGWOOD RECALLS OLD LEGEND

A legend concerning dogwood is quite as lovely as the very petals of the bloom.

At the time of the Crucifixion, goes the story, the dogwood tree was the size of all large forest trees, and because of its height and the strength of its wood, it was chosen for the timber of the Cross. The tree was greatly distressed to be used for such a purpose, and Jesus, sensing its sorrow smiled upon the tree and said to it:

"Because of your regret and pity for my suffering I make you this promise—never again shall the dogwood tree grow large enough for a cross. Henceforth, it shall be shorter and bent and twisted, and its blossoms shall be in the form of a cross—two large petals and two short petals, and in the center of the outer edge of each petal there will be an image of a crown of thorns and all who see it will remember that it was a dogwood tree that I was crucified on, and this tree shall not be mutilated or destroyed but cherished as a reminder of my death upon the Cross."

—Copied from the Harlan County Enterprise.

## News From The Counties

### CAMPBELL-KENTON

Dr. and Mrs. J. A. Caldwell have returned from a vacation, including lots of fishing in Canada.

Dr. and Mrs. C. A. Morris and family spent their vacation in Mexico.

Dr. and Mrs. J. H. Caldwell have returned from a tour of the Great Smoky Mountains.

### GRAVES

Dr. and Mrs. J. O. Day and Miss Clarice Lee of Louisville, visited Dr. and Mrs. J. F. Day, Mayfield, during August.

Mr. and Mrs. Henry Stewart, Shreveport, Louisiana, visited Mrs. Stewart's grandmother, Mrs. Onia Howard, Mayfield, during the summer. Mrs. Stewart, nee Miss Margaret Lee Flynn, a former member of the Graves County Auxiliary, is a great-granddaughter of the late Dr. S. J. Matthews, who delivered the Lyon Quintuplets, April 29, 1936, only quintuplets born in the United States.

Dr. G. E. Greer and Mrs. Greer, formerly of Mayfield but now located in Pulaski, Tennessee, have been visiting friends in Mayfield.

Mrs. Joe Sellars is visiting her son, Dr. M. J. Summerville, in Chicago.

On Saturday morning, May 31, at the Church of The Immaculate Conception, Ottoville, Ohio, Miss Elizabeth Merritt, youngest daughter of Dr. and Mrs. W. E. Merritt, Fancy Farm, became the bride of Mr. John F. Doepfer, Toledo, Ohio.

Dr. and Mrs. R. G. Ashley, Mayfield, have returned from a visit in Manchester, Tennessee.

Dr. and Mrs. Robert Orr, Hot Springs, Arkansas, are visiting Mrs. Orr's parents, Mr. and Mrs. W. W. Robertson, Mayfield.

Dr. Gayle Cantor, Detroit, Michigan, and Dr. Marvin Cantor, Akron, Ohio, were called to Mayfield in August by the illness of their father, Mr. H. M. Cantor.

Miss Lillie Atkins, daughter of Dr. and Mrs. N. M. Atkins, Mayfield, spent her vacation at home with her parents. She went to Nashville to attend the summer session at Peabody College. She was accompanied by her aunt, Miss Annie E. Smith, a member of the David Lipscomb College in Nashville.

Dr. and Mrs. C. H. Covington arrived at the Madera County Hospital, August 19, where Dr. Covington is resident physician for the coming year. Dr. Covington is the son of Mr. and Mrs. Ben Covington, former residents of Mayfield, and the great grandson of one of Mayfield's pioneer physicians, Dr. J. L. Dismukes.

Our heartfelt sympathy is extended to Mrs. William T. Vaughn, our faithful Corresponding Secretary for many years and to her family, in the loss of her husband, Mr. W. T. Vaughn, who passed away on July 7th.

A delightful luncheon meeting of the Graves County Auxiliary was held, July 16, at the home of Mrs. Harlan V. Usher, Sedalia. Attending were: Mrs. R. G. Ashley, Mrs. J. R. Shelton, Mrs. H. H. Hunt, Mrs. W. J. Shelton, Mrs. Jacob Mayer, Mrs. Andrew Mayer, and a visiting friend from Nashville, Mrs. J. P. Womack.

### HARDIN

Capt. L. H. Layman of Fort Benning, Ga., Wendell M. Layman and family of Prophetstown, Ill., spent their vacation in Elizabethtown with their mother, Mrs. R. T. Layman.

Mrs. Joseph M. Fowler spent two weeks with her sister, Mrs. Redmon, of Harvel, Ill.

Mrs. S. T. Carroll and Mrs. R. T. Layman spent two weeks in August at Pequot Lakes, in Minnesota. Also stopped in Rochester, and visited the Mayo Clinic.

Mr. and Mrs. C. E. Morgan visited their son, Lt. Stanley Morgan and Mrs. Morgan, at Camp Shelby, Miss.

Cadet G. W. Woodard has entered The Citadel, Military College at Charleston, S. C., after spending his vacation with his mother, Mrs. G. W. Woodard.





Miss Ruth Bale spent two weeks in August in Mexico City.

Dr. and Mrs. Garnett Bale, had as their Fourth of July guests, Mrs. Bale's Uncle and Aunt, Mr. and Mrs. Henry Barbour.

Mrs. Louis Mirsky and baby spent the summer in New York City, while Lt. Mirsky was in Louisiana on Maneuvers.

Mrs. Bessie White of Kalamazoo, Mich., is spending the summer with her daughter, Mrs. Edward E. Johnston and Major Johnston.

Dr. Millard Bethel and wife of Concord, N. C., spent his vacation with his parents, Mr. and Mrs. Wm. Bethel in Elizabethtown.

Hardin County Auxiliary has been taking a very active part in the health movement, assisted the Health Unit in every way possible and paid for X-ray work for indigent tubercular children.

First meeting of new year will be held in September, just before going to State Meeting. Our entire program has not been finished since so many of our members are away during the summer.

Miss Alice Ann Nusz, daughter of Dr. and Mrs. H. R. Nusz, Elizabethtown, became the bride of Mr. James Harry Black, Elizabethtown, Saturday evening, August 30. The wedding ceremony was performed at St. James Church by Rev. E. A. Reavy.

#### JEFFERSON

The Sewing Unit of the Jefferson County Auxiliary met during the summer months to sew for the Red Cross. Meetings were held at the homes of Mesdames; Bernard Asman, Steven McCoy, Parks Odgen, Oliver Kelsall, George Leachman.

The Quarterly luncheon was held on Monday, September 8, at the Brown Hotel. Doctor Robert Hendon was guest speaker. His entertaining and enlightening lecture was followed by a business meeting.

Wednesday, September 10, was chosen as the Jefferson County Medical Auxiliary Day at the Log Cabin and Cancer Control Tent at the Kentucky State Fair. Many out of town visitors to the Fair were served a most delightful luncheon by members of the Auxiliary who also acted as guides. The proceeds of the lunch were donated to the Cancer Control.

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A drunken driver crashed into the car in which Mrs. R. E. Mosiman, Seattle, Miss Louise Morel and Mrs. Jos. E. Wier were driving October 2, with Mrs. A. T. McCormack, approaching Somerset. All escaped with minor injuries except Miss Morel, whose chin and neck were badly bruised, and Mrs. Wier, whose face was cut by the shattering wind shield.

#### MARSHALL

We regret to report that Dr. Van A. Stilley has been confined to his bed during July and August. He is now on the road to recovery and we hope that he will be up and about again by the time this goes to press. During this illness, Dr. Stilley has by no means been forgotten. Numbers and numbers of doctors have visited him or called on the phone to know about his illness. Dr. Goodloe from the State Department of Health has twice been a visitor. Dr. P. E. Blackerby, Assistant State Health Commissioner, Dr. H. H. Hunt and Dr. J. W. Shelton have also called to see Dr. Stilley. Every health officer in West Kentucky has either called at the home or by phone.

Lawrence Lee Washburn, Jr., son of Dr. and Mrs. Lawrence Lee Washburn, graduated in June from high school with first honors. He has entered Western State Teachers College Bowling Green for his pre-medical training.

A number of our County Health Nurses have expressed a desire to become members of our Auxiliary. We hope that we will be able to include them as associate members eventually.

#### MADISON

Born in Shreveport, Louisiana, June 12th., Patricia Floyd Phillips, daughter of Mr. and Mrs. Thomas Phillips. Mrs. Phillips is the daughter of Dr. and Mrs. John B. Floyd and little Miss Patricia is their first grandchild.

What we have done for ourselves alone dies with us. What we have done for others and the world remains and is immortal.

—Albert Pike.

# DIRECTORY OF KENTUCKY STATE MEDICAL AUXILIARY

## WOMAN'S AUXILIARY TO THE KENTUCKY STATE MEDICAL ASSOCIATION 1941-1942

NEXT MEETING, MURRAY  
SEPTEMBER, 1941

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